



Infrastructure, buildings, environment, communications

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## ATTN: Information Technology Unit

California Regional Water Quality Control Board  
Los Angeles Region (RWQCB)  
320 West 4th Street, Suite 200  
Los Angeles, California 90013

## ENVIRONMENTAL

Subject:

Second Quarter 2005 Discharge Monitoring Report - Draft  
Waste Discharge Requirements Order Number R4-2002-0030 (Series 007)  
Compliance File Number CI-95-036, SLIC 0410  
Project Site: Former Boeing C-6 Facility (Building 2 Area), Los Angeles, California

Date:  
July 22, 2005

Dear Information Technology Unit:

On behalf of Boeing Realty Corporation (BRC), ARCADIS is submitting this quarterly monitoring report per the Waste Discharge Requirements (WDR) Order Number R4-2002-0030 (Series 007). The purpose of this report, and future WDR reports, is to provide the Los Angeles Regional Water Quality Control Board (RWQCB) with a summary of bioremediation amendment injections and groundwater monitoring activities performed at the above-referenced project site. The site is located at 19503 Normandie Avenue, Los Angeles, California. Figures 1 and 2 illustrate the site location and the site layout, respectively.

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Project Number:  
CA000663.0001.00005

This monitoring report summarizes groundwater amendment and monitoring activities performed during the second quarter of 2005. Amendment activities performed are summarized in Section 1.0. Groundwater monitoring activities performed to evaluate the initial distribution of amendment solution are summarized in Section 2.0. A certification statement is provided in Section 3.0.

## 1.0 Amendment Activities

Amendment activities (carbohydrate injection or water injection testing activities) were not conducted during the second quarter of 2005.

## 2.0 Monitoring Activities

During the second quarter of 2005, Week 36 of post-injection groundwater monitoring was conducted per the WDR monitoring schedule (sample Week 2, Week 6, Week 12, Week 16, Week 21, and Week 36 after the first injection).

July 22, 2005

Week 36 post-injection groundwater monitoring was conducted on June 15, 2005. During Week 36 of post-injection monitoring, 12 monitoring wells (IRZMW001A/B, IRZMW002A/B, IRZMW004, IRZMW005, IRZCMW001, IRZCMW002, IRZCMW003, CMW001, CMW002, and CMW026) were gauged. Four monitoring wells (IRZMW004, IRZCMW002, CMW001, and CMW002) were sampled. The monitoring well locations are identified on Figure 2. The groundwater samples from Week 36 post-injection monitoring were analyzed for volatile organic compounds (VOCs), total organic carbon (TOC), bromide, total iron, total manganese, dissolved manganese, nitrate, sulfate, and permanent gases (dissolved oxygen [DO], carbon dioxide, nitrogen, methane, ethane, and ethene). Field parameters of purged groundwater were also collected (ferrous iron, pH, DO, oxidation reduction potential [ORP], specific conductance, and temperature).

Field parameter data, laboratory analytical methods, and analytical results from the groundwater monitoring events are summarized in Tables 1 through 4. Laboratory analytical data with associated chain-of-custody documentation are provided in Appendix A. Sample collection logs with field parameters and monitoring well sampling data are maintained in the project files and are not provided with this report.

Prior to collecting the groundwater samples, depth to groundwater was measured in each monitoring well by using a water level meter accurate to 0.01 feet. Figure 3 shows the groundwater elevation contours for Zones B and C in June 2005. Groundwater samples were collected using low flow sampling techniques, so that the purge rate was generally less than 600 milliliters per minute (mL/min) and drawdown while purging was less than 1 foot.

The sampling methodology also involved use of a flow-through cell that contains field instrumentation used to measure groundwater stabilization parameters (i.e., temperature, pH, specific conductance, ORP, and DO). For each monitoring well, the flow-through cell was connected to a submersible pump with dedicated polyethylene tubing. Once the field parameters stabilized, groundwater samples were collected in laboratory-prepared containers. Field parameters and other relevant sampling data were documented on sample collection logs. The groundwater samples were transported in a chilled ice chest with proper chain-of-custody documentation to an analytical laboratory certified by the State of California (Severn Trent Laboratories, Inc.).

### 3.0 Certification Statement

I declare under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

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LA Regional Water Quality  
Control Board Information  
Technology Unit

July 22, 2005

Based on my inquiry of the person or persons who managed the system or those directly responsible for gathering the information, the information submitted, is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

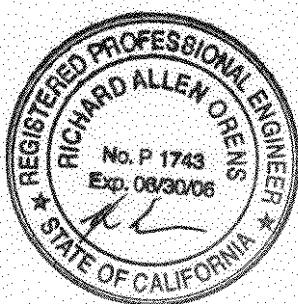
If you have any questions or comments regarding this discharge monitoring report, please contact Barry Molnaa or Eric Lothman at (714) 278-0992.

Sincerely,

ARCADIS G&M, Inc.

Eric Lothman, P.E.  
Project Engineer

Richard Orens, P.E.  
Senior Engineer

  
Barry Molnaa  
Project Manager

Copies:  
Stephanie Sibbett-Brutocao, Boeing Realty Corporation  
Project File

Enclosures:

- Figure 1 - Site Location
- Figure 2 - Amendment Point and Monitoring Well Locations
- Figure 3 - Groundwater Contour Map for Zones B and C - June 2005
- Table 1 - Groundwater Parameter and Total Organic Carbon Results
- Table 2 - Inorganic Analytical Results
- Table 3 - Volatile Organic Compound Analytical Results
- Table 4 - Permanent Gas Analytical Results
- Appendix A - Laboratory Reports and Chain-of Custody Documents

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## Figures

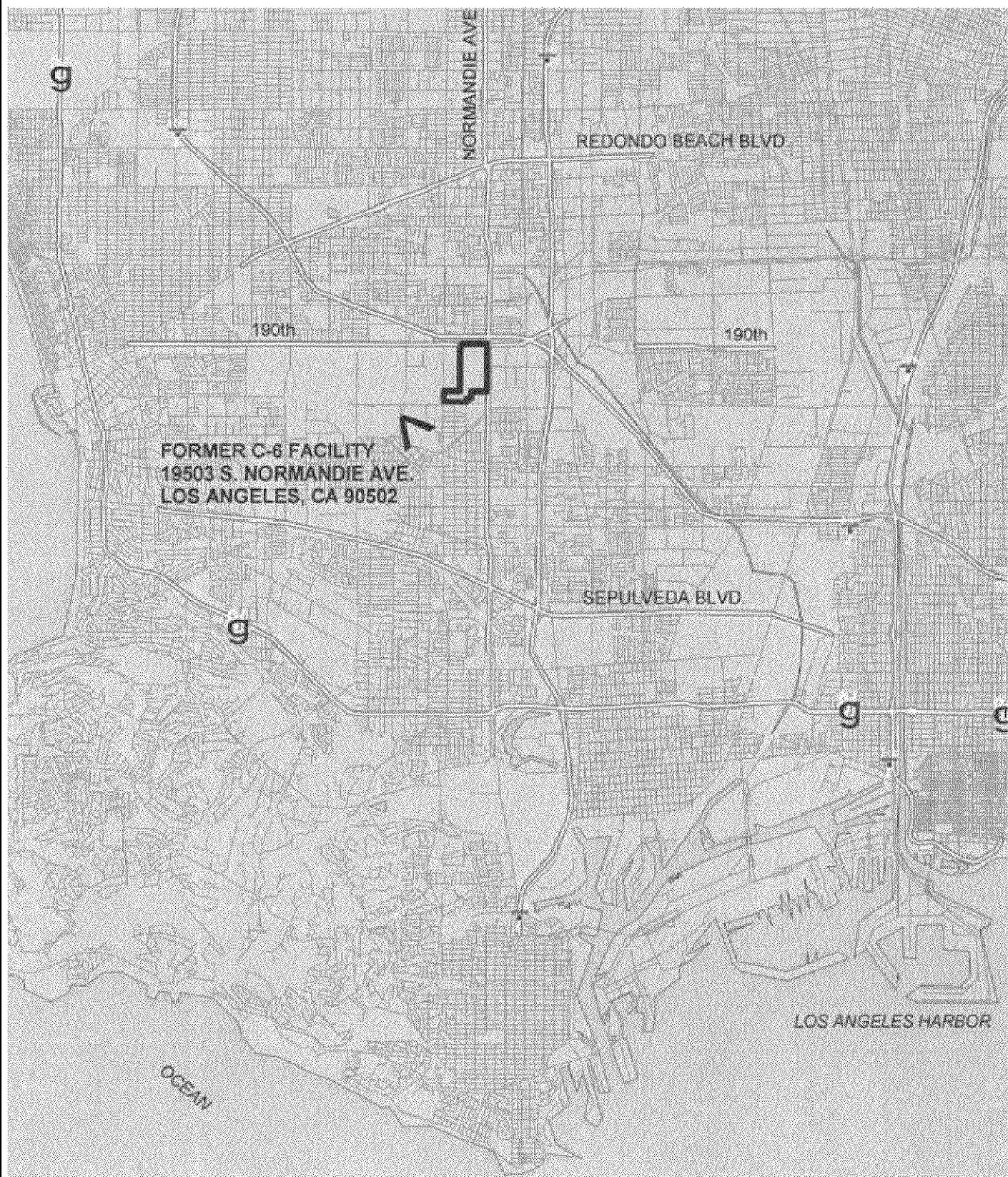
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PIM: MOLINA

ART: QUINONES



Base map download from 'Tiger File' data website hosted by ESRI.

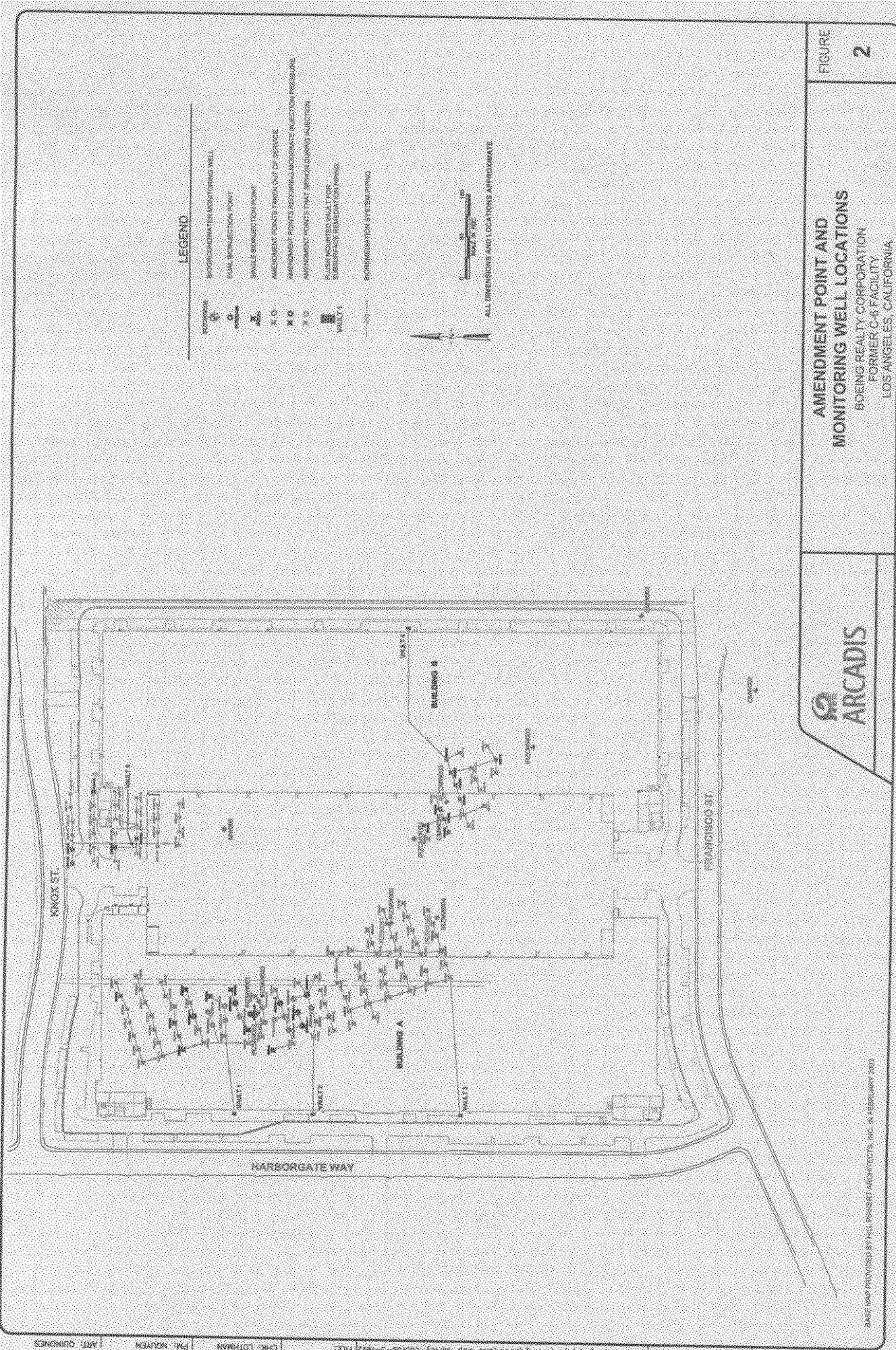


## SITE LOCATION

BOEING REALTY CORPORATION  
FORMER C-6 FACILITY  
LOS ANGELES, CALIFORNIA

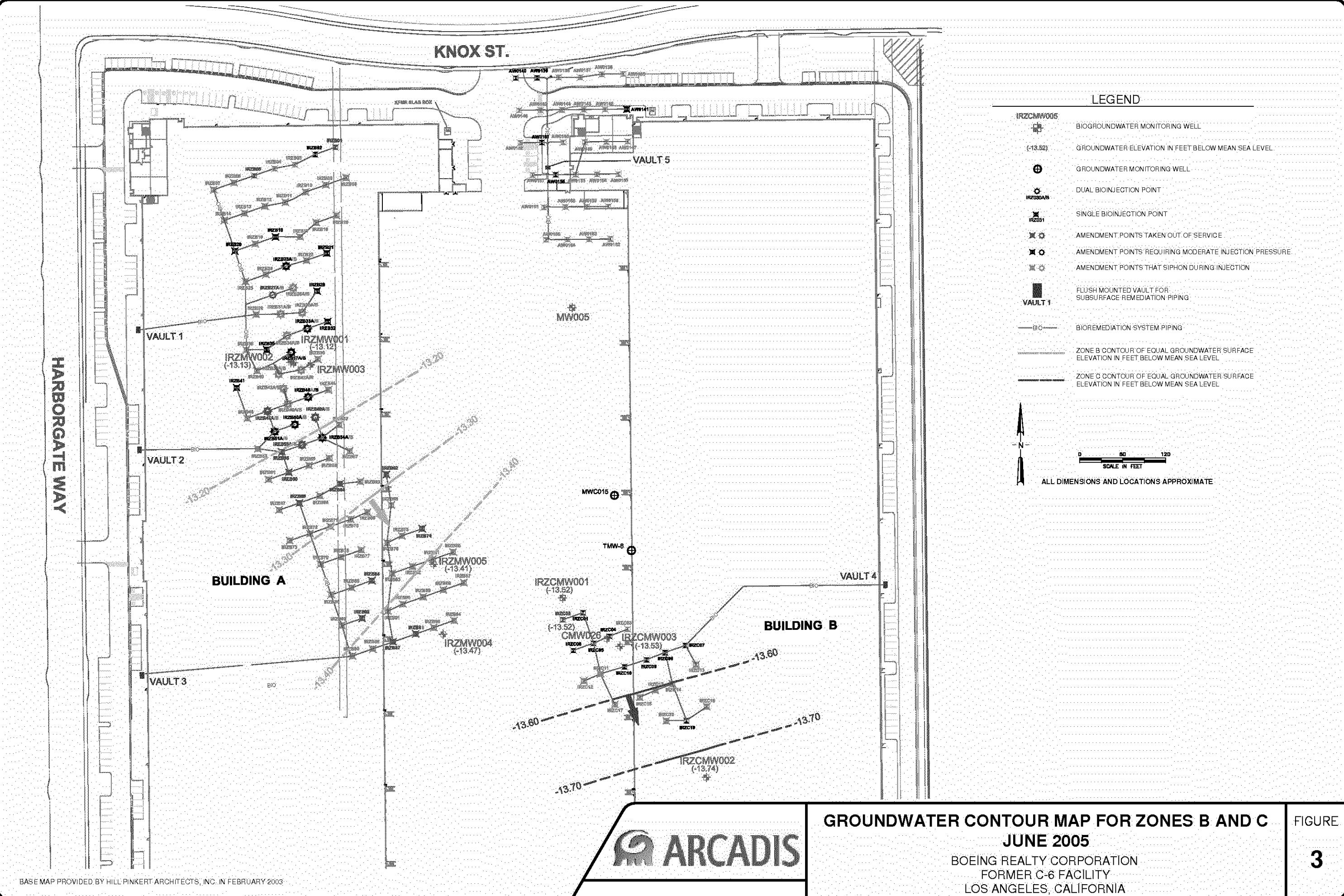
FIGURE

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ART: CHIU  
PM: MOLNAA  
CHK: LOTHMAN  
FILE:



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**Tables**

**Table 1. Groundwater Parameter and Total Organic Carbon Results**  
**Former Building 2 Area, Former Boeing C-6 Facility**

Well Number	Screened Zone	Well Group	Sampling Event	Sample Date	Top of Casing (feet msl)	Depth to Water (feet)	Groundwater Elevation (feet msl)	pH	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Temperature (°C)	Specific Conductance (mmhos/cm)	Hydrogen Sulfide (mg/L)	Ferrous Iron (mg/L)	Total Organic Carbon (mg/L)
IRZB0081	Zone B	A	Baseline	10/9/2003	50.28	64.53	-14.25	6.7	5.1	144.4	21.6	1,563	Too Turbid	Too Turbid	5.8
			Week 2	10/22/2004		64.51	-14.23	7.3	3.7	-42.8	22.6	922	0	<1.0	2.8
			Alt. Amend. Monitoring	12/14/2004		64.48	-14.20	5.2	1.8	-53.0	21.9	8,147	NM	NM	4,560
			Week 12	1/5/2005		64.61	-14.33	4.9	1.3	-21.9	21.7	7,384	Too Turbid	Too Turbid	6,140
			Alt. Amend. Monitoring	1/14/2005		64.39	-14.11	4.9	27.9	6.5	22.4	4,755	NM	NM	4,750
			Week 16	1/28/2005		64.25	-13.97	5.1	0.8	-43.1	21.7	4,803	<2.5	2.2	3,750
			Alt. Amend. Monitoring	2/11/2005		63.94	-13.66	5.7	1.1	-92.9	21.7	4,088	NM	NM	2,140
			Week 21	3/20/2005		64.29	-14.01	5.5	2.1	68.2	22.1	5,309	0.7	Too Turbid	3,260
		A	Baseline	10/7/2003	50.08	64.59	-14.51	7.0	5.6	83.7	23.1	1,435	0	1.3	3.0
			Week 2	10/22/2004		64.50	-14.42	7.4	5.1	-47.1	22.2	661	0	<1.0	2.4
			Week 6	11/19/2004		64.37	-14.29	7.4	6.7	67.2	22.1	1,142	Too Turbid	Too Turbid	4.4
			Alt. Amend. Monitoring	12/14/2004		64.49	-14.41	7.4	4.9	-5.4	22.2	1,296	NM	NM	3.3
			Week 12	1/5/2005		65.28	-15.20	6.8	2.6	-90.5	21.1	5,873	Too Turbid	Too Turbid	1,890
			Alt. Amend. Monitoring	1/14/2005		NM	--	6.7	20.6	-107.7	21.9	4,858	NM	NM	2,400
			Week 16	1/28/2005		64.41	-14.33	6.7	2.1	-98.1	20.7	4,592	<2.0	1	2,060
		A	Alt. Amend. Monitoring	2/11/2005	54.18	64.04	-13.96	6.8	2.4	-103.8	21.0	4,244	NM	NM	1,580
			Week 21	3/20/2005		64.29	-14.21	6.9	3.5	-116.4	21.6	2,555	0	Too Turbid	811
			Baseline	10/30/2003		68.05	-13.87	6.7	4.8	245.9	21.9	2,354	0	0	5.0
			Injection Evaluation	5/21/2004		68.61	-14.43	7.1	2.7	47.4	25.3	2,595	NM	NM	5.5
			Injection Evaluation	10/12/2004		67.69	-13.51	6.0	1.2	-31.6	21.0	2,538	NM	NM	3.5
			Week 2	10/22/2004		68.00	-13.82	6.9	0.3	-10.1	25.6	2,339	0	<1.0	4.3
			Week 6	11/18/2004		68.08	-13.90	6.9	1.5	33.1	27.1	2,048	0	<1.0	5.3
		A	Week 12	1/4/2005	54.10	67.84	-13.66	6.9	0.4	21.9	24.2	2,345	0	<1.0	6.1
			Week 16	1/27/2005		67.85	-13.67	6.9	0.3	64.8	22.8	1,893	0	0	4.4
			Week 21	3/19/2005		67.65	-13.47	6.9	0.3	-77.9	26.1	1,994	0	1.0	3.6
			Week 36	6/15/2005		67.28	-13.10	NM	NM	NM	NM	NM	NM	NM	NM
			Baseline	10/30/2003		67.98	-13.88	6.8	6.2	159.6	21.8	1,254	0	1	3.8
			Injection Evaluation	5/21/2004		68.11	-14.01	7.3	6.8	78.3	23.7	1,278	NM	NM	3.6
			Injection Evaluation	10/12/2004		67.70	-13.60	7.3	2.2	5.6	21.4	1,042	NM	NM	5.8
		A	Week 2	10/22/2004	54.10	68.07	-13.97	7.3	4.0	53.7	22.7	1,168	0	0.1	2.0
			Week 6	11/18/2004		68.00	-13.90	7.2	6.6	125.0	24.2	953	0.1	0.3	5.2
			Week 12	1/4/2005		67.72	-13.62	7.3	6.1	40.6	21.3	1,111	0	0.4	6.3
			Week 16	1/27/2005		67.77	-13.67	7.2	4.7	94.9	22.6	919	0	0	3.0
			Week 21	3/19/2005		67.59	-13.49	7.3	5.4	11.1	24.4	982	0.1	0.5	4.4
			Week 36	6/15/2005		67.22	-13.12	NM	NM	NM	NM	NM	NM	NM	NM
			Baseline	10/30/2003		67.98	-13.91	6.8	3.1	-140.7	22.1	1,852	5	2	21.8
		A	Injection Evaluation	5/21/2004	54.07	68.39	-14.32	7.2	0.9	-52.5	22.1	2,038	NM	NM	13.3
			Injection Evaluation	10/12/2004		67.85	-13.78	6.1	1.1	-54.1	21.5	2,760	NM	NM	11.1
			Week 2	10/21/2004		68.05	-13.98	6.4	0.2	-107.4	23.5	2,860	0	<1.0	10.1
			Week 6	11/18/2004		68.21	-14.14	6.5	2.2	-102.7	25.8	2,220	0	Too Turbid	9.7
			Week 12	1/4/2005		67.74	-13.67	6.8	0.9	-26.6	21.3	2,389	0	Too Turbid	7.2
			Week 16	1/27/2005		68.02	-13.95	6.8	0.7	19.3	22.2	1,882	0	0.5	6.0
			Week 21	3/19/2005		67.22	-13.15	6.9	0.8	-24.1	22.0	1,865	0	2	11.2
		A	Week 36	6/15/2005		67.19	-13.12	NM	NM	NM	NM	NM	NM	NM	NM
			Baseline	10/30/2003	54.17	68.07	-13.90	6.8	4.1	110.3	21.7	1,125	0	Too Turbid	4.1
			Injection Evaluation	5/21/2004		68.97	-14.80	7.2	4.2	45.5	24.0	1,204	NM	NM	5.2
			Injection Evaluation	10/12/2004		67.61	-13.44	7.1	1.3	8.6	21.5	1,254	NM	NM	6.2
			Week 2	10/21/2004		67.99	-13.82	7.3	2.4	-34.3	25.5	1,325	0	<1.0	2.8
			Week 6	11/18/2004		68.18	-14.01	7.1	4.6	48.3					

**Table 1. Groundwater Parameter and Total Organic Carbon Results**  
**Former Building 2 Area, Former Boeing C-6 Facility**

Well Number	Screened Zone	Well Group	Sampling Event	Sample Date	Top of Casing (feet msl)	Depth to Water (feet)	Groundwater Elevation (feet msl)	pH	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Temperature (°C)	Specific Conductance (mhos/cm)	Hydrogen Sulfide (mg/L)	Ferrous Iron (mg/L)	Total Organic Carbon (mg/L)
IRZMW003A	Zone B	B	Baseline	10/31/2003	54.14	68.21	-14.07	6.8	4.0	210.3	25.7	1,761	Too Turbid	Too Turbid	2.6
			Injection Evaluation	10/12/2004		67.79	-13.65	6.1	1.1	-8.9	21.6	3,107	NM	NM	5.7
			Week 12	1/4/2005		67.82	-13.68	6.6	0.5	-19.2	24.7	2,196	0	<1.0	9.7
			Week 16	1/27/2005		67.85	-13.71	6.6	0.3	123.2	24.7	1,747	0	0	5.5
			Week 21	3/19/2005		67.63	-13.49	6.8	0.5	-45.4	24.7	1,512	Too Turbid	0.3	8.4
	IRZMW003B	B	Baseline	10/31/2003	54.20	68.24	-14.04	6.8	5.0	280.4	23.3	1,154	Too Turbid	Too Turbid	3.8
			Injection Evaluation	10/12/2004		67.82	-13.62	7.2	3.9	-10.6	22.7	1,276	NM	NM	3.4
			Week 12	1/4/2005		67.84	-13.64	7.2	4.2	54.2	22.0	1,223	0	0.7	3.4
			Week 16	1/27/2005		67.89	-13.69	7.2	4.6	111.2	22.7	974	0	0	3.8
			Week 21	3/19/2005		67.67	-13.47	7.3	3.7	16.9	23.2	961	0	0.6	3.5
IRZMW004	Zone C	C	Baseline	10/7/2003	50.48	64.84	-14.36	7.0	4.8	152.9	22.5	1,449	0	0	3.1
			Injection Evaluation	10/12/2004		64.45	-13.97	7.2	2.5	-40.9	24.1	1,337	NM	NM	2.3
			Alt. Amend. Monitoring	12/14/2004		64.63	-14.15	7.2	4.2	-28.6	23.7	1,473	NM	NM	3.6
			Week 12	1/5/2005		64.77	-14.29	7.2	3.5	16.6	23.6	1,453	0.1	1.0	3.8
			Alt. Amend. Monitoring	1/14/2005		64.56	-14.08	7.1	46.0	109.7	23.2	1,213	NM	NM	4.0
		A	Alt. Amend. Monitoring	2/11/2005	48.94	64.16	-13.68	7.3	2.6	178.0	21.7	1,102	NM	NM	7.4
			Week 21	3/20/2005		64.45	-13.97	7.1	1.2	-130.7	23.0	1,149	0.3	3.0	31.7
			Week 36	6/15/2005		63.95	-13.47	6.7	1.3	-77.5	25.4	2,578	NM	<1.0	23.5
			Baseline	10/7/2003		63.38	-14.44	7.2	4.5	34.0	22.3	965	0	0	2.0
			Week 2	10/22/2004		63.33	-14.39	7.2	1.1	-86.7	22.7	123	0	1.0	1.6
CMW0026	IRZCMW003	A	Week 6	11/19/2004	48.94	63.28	-14.34	7.1	0.7	-202.7	24.0	384	0.2	0.7	11
			Week 12	1/5/2005		63.44	-14.50	7.0	1.6	-13.8	22.3	72	0	1.0	2.7
			Week 16	1/28/2005		63.31	-14.37	6.7	0.1	-108.7	22.6	459	0.8	3.2	22
			Week 21	3/19/2005		62.92	-13.98	7.3	3.6	12.8	22.2	64	0	1.4	11.0
			Week 36	6/15/2005		62.46	-13.52	NM	NM	NM	NM	NM	NM	NM	NM
		B	Baseline	10/7/2003	49.12	63.58	-14.46	7.2	2.7	133.5	22.8	951	0	0	2.0
			Injection Evaluation	10/12/2004		62.98	-13.86	7.3	1.1	-7.5	22.3	969	NM	NM	2.4
			Week 12	1/5/2005		63.62	-14.50	7.3	0.5	-45.8	21.5	907	0	0.2	2.7
			Week 16	1/28/2005		63.41	-14.29	7.3	0.3	105.3	22.6	729	0	0	2.3
			Week 21	3/19/2005		63.03	-13.91	7.4	0.2	-73.8	22.0	730	NM	0.4	2.8
IRZCMW002	IRZCMW002	C	Week 36	6/15/2005	52.98	62.65	-13.53	NM	NM	NM	NM	NM	NM	NM	NM
			Baseline	10/8/2003		67.78	-14.80	7.0	2.4	188.5	21.4	888	0	0	3.2
			Injection Evaluation	10/12/2004		67.25	-14.27	7.4	1.1	-51.0	21.4	974	NM	NM	2.2
			Week 12	1/5/2005		68.02	-15.04	7.4	0.9	146.5	21.3	912	0	0.2	2.2
			Week 21	3/19/2005		67.25	-14.27	7.7	0.2	-169.5	22.5	709	0.4	0.3	11.7
CMW001	CMW001	C	Week 36	6/15/2005	51.81	66.72	-13.74	7.2	0.2	-285.4	23.6	2,024	NM	<0.1	157
			Baseline	10/9/2003		66.81	-15.00	6.8	2.6	-120.0	23.3	948	0.5	0	23
			Week 12	1/5/2005		66.83	-15.02	7.3	0.5	-95.3	23.0	1,017	0	0.3	28
			Week 21	3/18/2005		66.63	-14.82	7.3	0.2	-62.2	23.5	806	0	0	26
CMW002	IRZCMW001	C	Week 36	6/15/2005	Not Surveyed	65.68	-13.87	7.3	0.5	-142.3	27.6	1,352	NM	<0.1	15.8
			Baseline	10/8/2003		65.29	--	6.9	2.2	51.4	23.0	788	0	0	8.0
			Week 12	1/3/2005		64.80	--	5.2	0.5	-6.6	22.5	875	0	0.2	14
			Week 21	3/18/2005		64.51	--	7.3	0.2	-56.7	22.6	699	0	0	12.7
			Week 36	6/15/2005		64.17	--	7.2	0.6	-72.6	24.1	1,427	NM	<0.1	13.3
IRZCMW001	D	D	Baseline	10/8/2003	49.14	63.65	-14.51	7.1	4.2	183.0	21.7	1,219	0	0	3.3
			Injection Evaluation	10/12/2004		NM	NM	7.2	2.5	-12.0	22.3	1,313	NM	NM	2.5
			Week 6	11/18/2004		63.52	-14.38	7.2	1.5	46.9	24.2	1,117	0	0.1	2.3
			Week 12	1/4/2005		63.41	-14.27	7.2	0.5	9.0</					

**Table 2. Inorganic Analytical Results**  
**Former Building 2 Area, Boeing C-6 Facility**

Well Number	Screened Zone	Well Group	Sampling Event	Sample Date	Bromide (mg/L)	Chloride (mg/L)	Total Iron (mg/L)	Dissolved Manganese (mg/L)	Total Manganese (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)
IRZB0081	Zone B	A	Baseline	10/9/2003	0.94	348	25	0.05	1.4	8.5	<1	43.8
			Week 12	1/5/2005	746	NS	NS	5.1	NS	<2	NS	104
			Week 16	1/28/2005	<2.5	NS	NS	7.0	NS	<2	NS	38.1
			Week 21	3/20/2005	<25	283	410	9.5	9.6	<1	<0.5	13.7
		A	Baseline	10/7/2003	0.85	320	3.30	0.052	0.78	7.2	<1	38.6
			Week 6	11/19/2004	0.64	NS	NS	0.016	NS	6.5 J	NS	49.7
			Week 12	1/5/2005	18	NS	NS	5.7	NS	<1	NS	45.5
			Week 16	1/28/2005	<5	NS	NS	7.1	NS	<0.5	NS	20.6
		A	Week 21	3/20/2005	<5	90	70	2.3	3.4	0.30	<1	22.0
			Baseline	10/30/2003	3.6	615	6.8	0.019	0.24 J	14	<1	88.6
			Week 6	11/18/2004	1.9	NS	NS	0.064	NS	8.8 J	NS	60.2
			Week 12	1/4/2005	1.9	NS	NS	0.019	NS	9.4	NS	62.9
			Week 16	1/27/2005	1.9	NS	NS	0.048	NS	9.2	NS	62.3
			Week 21	3/19/2005	2.1	490	0.35	0.15	0.17	3.1	0.3 JQC	59.3
IRZMW001B		A	Baseline	10/30/2003	0.73	218	2.9	0.020	0.09 J	5.8	<0.5	98.0
			Week 6	11/18/2004	0.41 J	NS	NS	0.0041 J	NS	6.8 J	NS	87.9
			Week 12	1/4/2005	0.43 J	NS	NS	0.0014 J	NS	7.2	NS	93.9
			Week 16	1/27/2005	0.47 J	NS	NS	0.037	NS	7.3	NS	93.2
			Week 21	3/19/2005	0.45 J	158	0.078 J	0.0023 J	0.02	5.5	<0.5	80.8
IRZMW002A		A	Baseline	10/31/2003	2.3	444	13	3.6	3.7 J	0.13	<1	77.8
			Week 6	11/18/2004	1.7	NS	NS	2.1	NS	4.3 J	NS	64.6
			Week 12	1/4/2005	1.8	NS	NS	1.7	NS	3.7	NS	68.1
			Week 16	1/27/2005	1.7	NS	NS	1.5	NS	5.0	NS	64.9
			Week 21	3/19/2005	1.8	509	3.6	1.5	1.9	3.0	<0.5	66.2
IRZMW002B		A	Baseline	10/30/2003	0.94	220	12	0.150	0.31 J	6.9	0.21 QC	80.9
			Week 6	11/18/2004	0.66	NS	NS	0.035	NS	8.6 J	NS	98.1
			Week 12	1/4/2005	0.64	NS	NS	0.018	NS	9.5	NS	94.8
			Week 16	1/27/2005	0.78	NS	NS	0.022	NS	8.1	NS	67.6
			Week 21	3/19/2005	0.73	229	1.3	0.044	0.07	2.7	<0.5	47.8
IRZMW005		A	Baseline	10/9/2003	0.97	358	2.5	0.02	0.10	8.6	<1	41.6
			Week 6	11/19/2004	0.98	NS	NS	0.05	NS	4.7 J	NS	36.0
			Week 12	1/5/2005	0.89	NS	NS	2.6	NS	<0.1	NS	23.4
			Week 16	1/28/2005	<25	NS	NS	3.5	NS	<0.5	NS	15.7
			Week 21	3/20/2005	<5	438	41.6	5.2	5.4	0.083 J	<1	5.3
IRZMW003A		B	Baseline	10/31/2003	1.1	465	5.6	0.0069 J	0.11 J	9.6	<1	48.3
			Week 12	1/4/2005	1.4	NS	NS	0.10	NS	6.1	NS	41.3
			Week 16	1/27/2005	1.3	NS	NS	0.12	NS	6.2	NS	41.7
			Week 21	3/19/2005	0.3 J	147	4.6	0.21	0.33	1.5	<0.5	14.0
IRZMW003B		B	Baseline	10/31/2003	0.69	240	8.1	0.051	0.23 J	6.3	<0.5	77.9
			Week 12	1/4/2005	0.59	NS	NS	0.021	NS	6.0	NS	80.8
			Week 16	1/27/2005	0.58	NS	NS	0.019	NS	5.9	NS	79.8
			Week 21	3/19/2005	0.56	185	0.75	0.0089 J	0.02	5.9	<0.5	65.9
IRZMW004		C	Baseline	10/7/2003	0.89	338	4.8	0.013 J	0.30	8.1	<1	41.2
			Week 12	1/5/2005	0.80	NS	NS	0.0028 J	NS	7.3	NS	42.1
			Week 21	3/20/2005	0.68	244	2.5	0.50	0.51 B	5.0	<0.5	42.7
			Week 36	6/15/2005	0.79	284	2.2	0.21J	0.23	6.3	<1	38.1
CMW026	Zone C	A	Baseline	10/7/2003	0.55	215	1.7	0.0054 J	0.09	2.8	<1	34.2
			Week 6	11/19/2004	0.18 J	NS	NS	0.380	NS	0.066 J	NS	4.0
			Week 12	1/5/2005	<0.5	NS	NS	0.035	NS	0.20	NS	5.0
			Week 16	1/28/2005	0.14 J	NS	NS	0.57	NS	<0.1	NS	2.3
			Week 21	3/19/2005	<0.5	3.8	1.8	0.06	0.06	0.44	0.08 J	5.5
IRZCMW003		B	Baseline	10/7/2003	0.51	191	1.1	0.015	0.16	1.6	<1	49.8
			Week 12	1/5/2005	0.38 J	NS	NS	0.016	NS	2.1	NS	52.6
			Week 16	1/28/2005	0.38 J	NS	NS	0.024	NS	2.1	NS	52.3
			Week 21	3/19/2005	0.36 J	138	0.77	0.014 J	0.10	1.6	<0.5	50.7

**Table 2. Inorganic Analytical Results  
Former Building 2 Area, Boeing C-6 Facility**

Well Number	Screened Zone	Well Group	Sampling Event	Sample Date	Bromide (mg/L)	Chloride (mg/L)	Total Iron (mg/L)	Dissolved Manganese (mg/L)	Total Manganese (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Sulfate (mg/L)
IRZCMW002	Zone C	C	Baseline	10/8/2003	0.37J	150	0.23	0.10	0.04	2.5	<0.5	62.5
			Week 12	1/5/2005	0.37J	NS	NS	0.0012 J	NS	3.2	NS	61.6
			Week 21	3/19/2005	0.38J	144	0.20	0.67	0.75	<0.1	<0.5	56.9
			Week 36	6/15/2005	0.19B	152	1.2	2.4J	2.8	<0.1	<1.0	3.6
	CMW001	C	Baseline	10/9/2003	0.32 J	127	2.8	0.12	0.16	<0.1	<1	115
			Week 12	1/5/2005	0.23 J	NS	NS	0.34	NS	<0.1	NS	156
			Week 21	3/18/2005	0.24 J	112	0.15	0.36	0.39	<0.1	<0.5	143
			Week 36	6/15/2005	0.22B	87.8	0.16	0.21J	0.23	<0.1	<0.1	99.0
	CMW002	C	Baseline	10/8/2003	0.24 J	110	0.63	0.21	0.13	<0.1	<0.5	84.9
			Week 12	1/3/2005	0.23 J	NS	NS	0.15 B	NS	<0.1	NS	89.0
			Week 21	3/18/2005	0.25 J	110	0.29	0.13	0.16	<0.1	<0.5	85.7
			Week 36	6/15/2005	0.24B	110	0.18	0.13J	0.15	<0.1	<0.1	89.1
IRZCMW001	D	D	Baseline	10/8/2003	0.73	275	1.9	0.0055 J	0.04	.27	<0.5	37.7
			Week 6	11/18/2004	0.67	NS	NS	0.0022 J	NS	2.2 J	NS	37.2
			Week 12	1/4/2005	0.69	NS	NS	0.0093 J	NS	2.1	NS	38.0
			Week 21	3/19/2005	0.68	273	0.093 J	0.02	0.02	2.0	<1.	35.9
EPA Analytical Method				300.0A	300.0A	6010B	6010A	6010B	300.0A	300.0A	300.0A	300.0A

Notes:

Group A: wells located within the estimated injection area

Group B: wells located at the estimated edge of the injection area

Group C: wells located downgradient of the treatment area

Group D: wells located upgradient of the treatment area

J - The analyte results were positively identified, and numerical values are an approximate concentration of the analyte in the sample.

QC - A quality control parameter associated with the analyte is not within laboratory or method required quality control limits.

<1.0 - Not detected above indicated reporting limit

NS - Not Sampled

**Table 3. Volatile Organic Compound Analytical Results**  
**Former Building 2 Area, Boeing C-6 Facility**

Well Number	Screened Zone	Well Group	Sampling Event	Sample Date	PCE (ug/L)	TCE (ug/L)	cis-1,2-DCE (ug/L)	trans-1,2-DCE (ug/L)	Vinyl Chloride (ug/L)	1,1,2-TCA (ug/L)	1,1-DCE (ug/L)	1,1-DCA (ug/L)	1,2-DCA (ug/L)	Acetone (ug/L)	Chlorobenzene (ug/L)	Chloroform (ug/L)	Methyl Ethyl Ketone (ug/L)	Methylene Chloride (ug/L)	
IRZB081	Zone A	A	Baseline	10/9/2003	<170	6,500	<170	<170	<170	63 J	<170	<170	<170	<1,700	<170	50 J	<830	<170	
			Alt. Amend. Monitoring	12/14/2004	<120	5,300	89 J	<120	<120	<120	60 J	<120	<120	<120	<1,200	<120	<120	<620	<120
			Week 12	1/5/2005	<50	1,900	100	<50	<50	<50	17 J	<50	<50	<50	<240 J	<50	<50	750	<50
			Alt. Amend. Monitoring	1/14/2005(a)	<50	3,000	150	<50	<50	<50	32 J	<50	<50	<50	<240 J	<50	<50	790	<50
			Week 16	1/28/2005	<100	4,600	260	<100	<100	<100	34 J	<100	<100	<100	<320 J	<100	<100	400 J	<100
		A	Alt. Amend. Monitoring	2/11/2005	<50	4,200	690	<50	<50	<50	39 J	<50	<50	<50	<390 J	<50	<50	19 J	260
			Week 21	3/20/2005	<50	2,300	2,600	<50	<50	<50	31 J	<50	<50	<50	690	<50	<50	1,600	<50
			Baseline	10/7/2003	<120	5,800	<120	<120	<120	<120	49 J	<120	<120	<120	<1,200	<120	150	<620	150
			Week 6	11/19/2004	<100	3,900	<100	<100	<100	<100	64 J	<100	<100	<100	<1,000	<100	85 J	<500	<100
			Alt. Amend. Monitoring	12/14/2004	<83	4,300	<83	<83	<83	<83	68 J	<83	<83	<83	<830	<83	96	<420	<83
IRZB095	Zone A	A	Week 12	1/5/2005	9 J	1,000	9.0 J	<25	<25	<12	11 J	<25	<25	<25	<250	<25	16 J	110 J	9.4 J
			Alt. Amend. Monitoring	1/14/2005	6.7 J	620	340	<10	<10	<10	12	<10	<10	<10	63 J	<10	66 J	170	2 J
			Week 16	1/28/2005	5.7 J	450	930	<12	<12	<12	15	<12	<12	<12	38 J	<12	12	130	<12
			Alt. Amend. Monitoring	2/11/2005	<25	440	1,100	<25	<25	<12	20 J	<25	<25	<25	95 J	<25	13 J	160	<25
			Week 21	3/20/2005	<25	430	1,700	<25	<25	<25	25	<25	<25	<25	<250	<25	13 J	77 J	<25
		A	Baseline	10/30/2003	<500	11,000	<500	<500	<500	<500	<500	<500	<500	<500	<5,000	<500	<500	<2,500	<500
			Week 6	11/18/2004	<120	7,200	43 J	<120	<120	<120	77 J	<120	<120	<120	<1,200	<120	<120	<620	<120
			Week 12	1/4/2005	<120	6,900	<120	<120	<120	<120	66 J	<120	<120	<120	<1,200	<120	<120	<620	<120
			Week 16	1/27/2005	<120	7,700	38 J	<120	<120	<120	58 J	<120	<120	<120	<1,200	<120	<120	<620	<120
			Week 21	3/19/2005	<250	9,800	2 J	<250	<250	<250	81 J	<250	<250	<250	<2,500	<250	<250	<1,200	<250
IRZMW001A	Zone B	A	Baseline	10/30/2003	<120	4,800	54 J	<120	<120	<120	50 J	<120	<120	<120	<1,200	<120	<120	<620	<120
			Week 6	11/18/2004	<25	1,400	<25	<25	<25	<25	19 J	<25	<25	<25	<250	<25	<25	<120	<25
			Week 12	1/4/2005	<25	1,300	<25	<25	<25	<25	16 J	<25	<25	<25	<250	<25	<25	<120	<25
			Week 16	1/27/2005	<25	1,600	<25	<25	<25	<12	17 J	<25	<25	<25	<250	<25	<25	<120	<25
			Week 21	3/19/2005	<50	2,100	<50	<50	<50	<50	25 J	<50	<50	<50	<500	<50	<50	<250	<50
		A	Baseline	10/30/2003	<120	5,100	660	<120	<120	<120	63 J	<120	<120	<120	<1,200	<120	<120	<620	<120
			Week 6	11/18/2004	<200	8,300	220	<200	<200	<200	79 J	<200	<200	<200	<2,000	<200	<200	<1,000	<200
			Week 12	1/4/2005	<100	7,100	460	<100	<100	<100	62 J	<100	<100	<100	<1,000	<100	<100	<500	<100
			Week 16	1/27/2005	<250	8,700	490	<250	<250	<250	250	<250	<250	<250	<2,500	<250	<250	<1,200	<250
			Week 21	3/19/2005(b)	<250	9,600	1,300	<250	<250	<250	81 J	<250	<250	<250	<2,500	<250	<250	<1,200	<250
IRZMW002B	Zone A	A	Baseline	10/30/2003	<12	640	80	<12	<12	<12	8.5 J	<12	<12	<12	73 JB	<12	<12	<62	<12
			Week 6	11/18/2004	<5	230	13	<5	<5	<5	3.0 J	<5	<5	<5	<50	<5	<5	<25	<5
			Week 12	1/4/2005	<2.5	170	6	<2.5	<2.5	<2.5	1.7 J	<2.5	<2.5	<2.5	8.8 J	<2.5	<2.5	<12	<2.5
			Week 16	1/27/2005	<5	240	7	<5	<5	<5	5 J	<5	<5	<5	<50	<5	<5	<25	<5
			Week 21	3/19/2005	<5	300	18	<5	<5	<5	3.5 J	<5	<5	<5	<50	<50	2.2 J	<5	<25
		A	Baseline	10/9/2003	<170	6,000	<170	<170	<170	<170	75 J	<170	<170	<170	<1,700	<170	56 J	<830	<170
			Week 6	11/19/2004	&lt														

**Table 3. Volatile Organic Compound Analytical Results  
Former Building 2 Area, Boeing C-6 Facility**

Well Number	Screened Zone	Well Group	Sampling Event	Sample Date	PCE (ug/L)	TCE (ug/L)	cis-1,2-DCE (ug/L)	trans-1,2-DCE (ug/L)	Vinyl Chloride (ug/L)	1,1,2-TCA (ug/L)	1,1-DCE (ug/L)	1,1-DCA (ug/L)	1,2-DCA (ug/L)	Acetone (ug/L)	Chlorobenzene (ug/L)	Chloroform (ug/L)	Methyl Ethyl Ketone (ug/L)	Methylene Chloride (ug/L)	
CMW026	Zone A		Baseline	10/7/2003	<25	1,200	<25	<25	<25	<25	65	<25	<25	<25	<250	<25	21 J	<120	<25
			Week 6	11/19/2004	<5	35	280	2.6 J	<5.0	<5	41	1.5 J	<5	<50	<5	<5	<25	<5	
			Week 12	1/5/2005	<1	6.5	17	<1.0	<1.0	<1.0	3.8	<1.0	<1.0	6.6 J	<1.0	<1.0	<5	<1.0	
			Week 16	1/28/2005	<2.5	30	160	1.2 J	<2.5	<2.5	16	0.71 J	11 J	<2.5	<2.5	14	<2.5		
			Week 21	3/19/2005	<1	3.8	40	0.47 J	<1	<1	11	<1	<1	19	<1	<1	<5	<1	
IRZCMW003	Zone B		Baseline	10/7/2003	<100	2,900	<100	<100	<100	<100	83 J	<100	<100	<1,000	<100	36 J	<500	89 J	
			Week 12	1/5/2005	<100	4,300	<100	<100	<100	<100	46 J	<100	<100	<1,000	<100	<100	<500	<100	
			Week 16	1/28/2005	<100	5,000	44 J	<100	<100	<100	49 J	<100	<100	<1,000	<100	<100	<500	<100	
			Week 21	3/19/2005	<120	5,700	350	<120	<120	<120	69 J	<120	<120	<1,200	<120	<120	<620	<120	
IRZCMW002	Zone C		Baseline	10/8/2003	<100	4,600	<100	<100	<100	<100	39 J	<100	<100	<1,000	<100	36 J	<500	<100	
			Week 12	1/5/2005	<120	5,200	<120	<120	<120	<120	120	<120	<120	<1,200	<120	<120	<620	<120	
			Week 21	3/19/2005	<120	7,700	<120	<120	<120	<120	38 J	<120	<120	<1,200	<120	<120	<620	<120	
			Week 36	6/15/2005	<50	87	4,800	25 J	<50	<50	32 J	<50	<50	<500	<50	<50	<250	<50	
CMW001	Zone C		Baseline	10/9/2003	<120	<120	<120	<120	<120	<120	<120	<120	<120	<1,200	7,300	60 J	<620	<120	
			Week 12	1/5/2005	<250	<250	<250	<250	<250	<250	<250	<250	<250	<2,500	12,000	<250	<1,200	<250	
			Week 21	3/18/2005	<400	<400	<400	<400	<400	<400	<400	<400	<400	<4,000	15,000	<400	<2,000	<400	
			Week 36	6/15/2005	<120	<120	<120	<120	<120	<120	<120	<120	<120	<1,200	9,000	<120	<620	<120	
CMW002	Zone C		Baseline	10/8/2003	<100	460	<100	<100	<100	<100	<100	<100	<100	<1,000	3,600	<100	<500	<100	
			Week 12	1/3/2005	<120	330	<120	<120	<120	<120	<120	<120	<120	<1,200	4,900	<120	<620	<120	
			Week 21	3/18/2005(c)	<100	390	<100	<100	<100	<100	<100	<100	<100	<1,000	6,300	<100	<500	<100	
			Week 36	6/15/2005	<100	430	<100	<100	<100	<100	<100	<100	<100	<1,000	7,400	<100	<500	<100	
IRZCMW001	Zone D		Baseline	10/8/2003	<62	1,300	22 J	<62	<62	<62	350	13 J	<62	210 J	<62	76	<310	<62	
			Week 6	11/18/2004	<12	920	15	6.3 J	<12	4.7 J	200	8.6 J	64 J	<120	<12	44	<62	<12	
			Week 12	1/4/2005	<25	1,000	16 J	<25	<25	<12	250	8.4 J	<25	<250	<25	41	<120	<25	
			Week 21	3/19/2005	<25	1,600	24 J	12 J	<25	8.6 J	420	15 J	11 J	<250	<25	55	<120	<25	
EPA Analytical Method				8260B	8260B	8260B	8260B	8260B	8260B	8260B	8260B	8260B	8260B	8260B	8260B	8260B	8260B		

Notes:

Group A: wells located within the estimated injection area.

Group B: wells located at the estimated edge of the injection area.

Group C: wells located downgradient of the treatment area.

Group D: wells located upgradient of the treatment area.

ug/L - micrograms per liter

< - not detected above indicated reporting limit

PCB - tetrachloroethene

TCE - trichloroethene

DCE - dichloroethene

TCA - trichloroethane

DCA - dichloroethane

J - estimated result less than reporting limit

JB - acetone detected at 11 ug/L in trip blank

(a) 2-Hexanone was also detected at a concentration of 2,000 ug/L

(b) Methyl tert-butyl ether was also detected at an estimated concentration of 3.9 ug/L

(c) Benzene was also detected at a concentration of 38 ug/L

**Table 4. Permanent Gas Analytical Results  
Former Building 2 Area, Boeing C-6 Facility**

Well Number	Screened Zone	Well Group	Sampling Event	Sample Date	Dissolved Oxygen (mg/L)	Carbon Dioxide (mg/L)	Nitrogen (mg/L)	Methane (µg/L)	Ethane (µg/L)	Ethene (µg/L)
IRZB0081	Zone B	A	Baseline	10/9/2003	3.7	16.9	12.6	<0.2	0.06	0.11
			Week 12	1/5/2005	2.0	750	6.8	184	0.03	0.10
			Week 16	1/28/2005	<0.25	800	5.3	3.1	0.12	0.20
			Week 21	3/20/2005	0.34	790	5.7	5,300	0.03	0.17
IRZB0095		A	Baseline	10/7/2003	2.7	14.0	8.7	<0.2	0.05	0.08
			Week 6	11/19/2004	2.9	10.8	7.8	1.1	0.02	0.02
			Week 12	1/5/2005	0.30	253	6.0	3.9	0.05	0.25
			Week 16	1/28/2005	0.47	320	12	0.19	0.86	0.41
			Week 21	3/20/2005	2.7	160	23	3,100	0.01	0.34
IRZMW001A		A	Baseline	10/30/2003	1.2	27	10	2.9	0.07	0.05
			Week 6	11/18/2004	0.48	27	3.7	1.8	0.01	<0.01
			Week 12	1/4/2005	0.49	42	5.9	488	0.01	0.02
			Week 16	1/27/2005	2.0	55	16	2.6	0.03	0.09
			Week 21	3/19/2005	3.3	74	.18	5,600	<0.005	<0.005
IRZMW001B		A	Baseline	10/30/2003	4.1	21	.12	0.4	0.04	0.02
			Week 6	11/18/2004	3.3	15	7.9	<0.2	0.01	<0.01
			Week 12	1/4/2005	4.9	17	.12	0.3	0.02	0.01
			Week 16	1/27/2005	NS	NS	NS	NS	NS	NS
			Week 21	3/19/2005	8.8	26	22	74	0.03	0.02
IRZMW002A		A	Baseline	10/30/2003	0.62	39	8.7	4.0	1.2	3.3
			Week 6	11/18/2004	0.53	103	2.5	5.2	0.02	0.12
			Week 12	1/4/2005	1.8	48	5.2	5.0	0.04	0.25
			Week 16	1/27/2005	5.1	53	17	0.02	0.08	0.07
			Week 21	3/19/2005	5.6	66	18	230	0.08	1.1
IRZMW002B		A	Baseline	10/30/2003	3.4	17	16	6.0	1.3	2.1
			Week 6	11/18/2004	1.6	14	4.7	1.3	0.02	0.02
			Week 12	1/4/2005	3.2	17	9.4	1.8	0.02	0.01
			Week 16	1/27/2005	4.5	20	.16	0.01	0.04	0.18
			Week 21	3/19/2005	3.0	91	26	24	0.07	0.12
IRZMW005		A	Baseline	10/9/2003	5.0	16	.14	<0.2	0.06	0.07
			Week 6	11/19/2004	0.24	208	3.6	234	<0.01	0.02
			Week 12	1/5/2005	2.8	362	.15	3,998	0.03	0.32
			Week 16	1/28/2005	0.81	270	.13	3.6	0.07	0.25
			Week 21	3/20/2005	2.3	380	.14	10,000	<0.005	0.79
IRZMW003A		B	Baseline	10/31/2003	3.1	25	16	0.5	0.17	0.10
			Week 12	1/4/2005	3.6	156	16	913	0.01	0.08
			Week 16	1/27/2005	2.5	160	15	3.1	<0.005	0.09
			Week 21	3/19/2005	5.9	150	26	3,600	<0.005	0.04
IRZMW003B		B	Baseline	10/31/2003	3.7	18	12	0.7	0.09	0.08
			Week 12	1/4/2005	4.0	18	12	32	0.01	0.01
			Week 16	1/27/2005	7.0	20	22	0.01	<0.005	0.03
			Week 21	3/19/2005	6.6	21	24	92	0.02	0.02
IRZMW004		C	Baseline	10/7/2003	2.7	15	8.4	0.30	0.05	0.06
			Week 12	1/5/2005	3.1	17	.10	2.2	0.02	0.01
			Week 21	3/20/2005	6.5	38	27	21	0.08	0.22
			Week 36	6/15/2005	2.9	42	20	67	0.05	0.12
			Baseline	10/7/2003	2.5	6.7	.15	0.90	0.52	0.04
CMW026	Zone C	A	Week 6	11/19/2004	0.27	14	8.2	1,994	<0.01	0.21
			Week 12	1/5/2005	0.89	3.4	5.5	2,038	<0.005	0.11
			Week 16	1/28/2005	2.4	45	11	17	<0.005	0.42
			Week 21	3/19/2005	7.6	7.8	25	2,100	0.01	0.35
IRZCMW003		B	Baseline	10/7/2003	1.1	7.1	12	1.6	0.95	0.88
			Week 12	1/5/2005	0.93	12	15	4.3	0.02	0.05
			Week 16	1/28/2005	3.2	11	21	0.01	0.08	0.11
			Week 21	3/19/2005	5.8	13	33	22	0.04	0.17

**Table 4. Permanent Gas Analytical Results  
Former Building 2 Area, Boeing C-6 Facility**

Well Number	Screened Zone	Well Group	Sampling Event	Sample Date	Dissolved Oxygen (mg/L)	Carbon Dioxide (mg/L)	Nitrogen (mg/L)	Methane (µg/L)	Ethane (µg/L)	Ethene (µg/L)
IRZCMW002	Zone C	C	Baseline	10/8/2003	0.94	7.2	15	0.6	0.43	1.2
			Week 12	1/5/2005	0.83	6.8	9.9	0.3	0.03	0.02
			Week 21	3/19/2005	1.9	5.5	26	4.9	0.08	0.51
			Week 36	6/15/2005	0.8	30	17	59	0.09	0.67
CMW001		C	Baseline	10/9/2003	1.7	9.1	13	4.8	1.5	2.3
			Week 12	1/5/2005	0.94	12	10	13	0.25	0.44
			Week 21	3/18/2005	3.1	15	22	22	0.42	0.35
			Week 36	6/15/2005	2.3	10	19	6.3	0.22	0.30
CMW002		C	Baseline	10/8/2003	2.5	11	16	0.90	0.14	1.04
			Week 12	1/3/2005	1.1	12	11	0.80	0.13	0.12
			Week 21	3/18/2005	5.9	15	31	14	0.24	0.08
			Week 36	6/15/2005	4.4	15	21	3.3	0.24	0.07
IRZCMW001		D	Baseline	10/8/2003	3.1	13	15	0.3	0.11	0.18
			Week 6	11/18/2004	0.98	13	7.1	503	<0.01	0.07
			Week 12	1/4/2005	0.72	17	11	6,810	<0.005	0.18
			Week 21	3/19/2005	3.3	19	16	11,000	<0.005	0.31
Analytical Method				RSK 175	RSK 175	RSK 175	RSK 175	RSK 175	RSK 175	RSK 175

**Notes:**

- Group A: wells located within the estimated injection area
- Group B: wells located at the estimated edge of the injection area
- Group C: wells located downgradient of the treatment area
- Group D: wells located upgradient of the treatment area

mg/L - milligrams per liter

µg/L - micrograms per liter

< - Not detected above indicated reporting limit

NS - Not Sampled

**ARCADIS**

**Appendix A**

**Laboratory Reports and Chain of Custody Documents**

SEVERN  
TRENT

STL

June 27, 2005

STL LOT NUMBER: E5F170101  
NELAP Certification Number: 01118CA/E87652  
PO/CONTRACT: 050160-SEV01-002

STL Los Angeles  
1721 South Grand Avenue  
Santa Ana, CA 92705

Tel: 714 258 8610 Fax: 714 258 0921  
[www.stl-inc.com](http://www.stl-inc.com)

Eric Lothman  
ARCADIS Geraghty & Miller, Inc  
1400 N. Harbor Blvd.  
Suite 700  
Fullerton, CA 92835-4127

Dear Mr. Lothman,

This report contains the analytical results for the five samples received under chain of custody by STL Los Angeles on June 16, 2005. These samples are associated with your Boeing former C6 facility Torrance, California project.

All applicable quality control procedures met method-specified acceptance criteria except as noted on the following page. Historical control limits for the LCS are used to define the estimate of uncertainty for a method. See Project Receipt Checklist for container temperature and conditions. Temperature reading between 2 to 6 degrees Celsius is considered within acceptable criteria. Any matrix related anomaly is footnoted within the report.

STL Los Angeles certifies that the tests performed at our facility meet all NELAP requirements for parameters for which accreditation is required or available. The case narrative is an integral part of the report. This report shall not be reproduced except in full, without the written approval of the laboratory.

If you have any questions, please feel free to call me at (714) 258-8610 extension 325.

Sincerely,



Diane Suzuki  
Project Manager

CC: Project File

000063  
Page 1 of \_\_\_\_\_ total pages in this report.



Severn Trent Laboratories, Inc.

Leaders in Environmental Testing

000001

BOE-C6-0011982

LOT NUMBER E5F170101

**Nonconformance 05-12913**

**Affected Samples:**

E5F170101 (1): TRIP BLANK\_WG061505\_01

E5F170101 (2): IRZMW004\_WG061505\_01

**Affected Methods:**

None specified.

**Case Narrative:**

*One VOA vials from samples above contain bubbles > 6mm in diameter. Analysis is performed on a VOA vial without headspace when available.*

**Nonconformance 05-13010**

**Affected Samples:**

E5F170101 (2): IRZMW004\_WG061505\_01

E5F170101 (3): IRZCMW002\_WG061505\_01

E5F170101 (4): CMW001\_WG061505\_01

E5F170101 (5): CMW002\_WG061505\_01

**Affected Methods:**

6010B

**Case Narrative:**

*Samples were received unfiltered and unpreserved for Dissolved Metals Analysis. Per client request, the samples were filtered and preserved to a pH <2 with Nitric Acid prior to metals digestion.*



000002

BOE-C6-0011983



### *Custody Record*

**Severn Trent Laboratories, Inc.**

STL-4124 (0901)

Project Manager	Epic Lottman
Date	15/05/2024
Chain of Custody Number	220247

Address 1408 N. HARBOUR BLVD. SUITE 700		Telephone Number/Area Code/Fax Number (714) 278-0992 / (714) 278-0851	Lab Number ESTF170101	Page 1 of 1
City FULTON		Site Contact STEPHEN GRANT	Analysis (Attach list if more space is needed)	
State CA	Zip Code 92835	Lab Contact DINA SIEBEL		
Project Name and Location (State) BOEING C-4		Carrier/Maybill Number CA		

324 Matrix  
Preservatives

TRIP BALTIC-MOSCOW-01 16/05/05 -

102-mW004-WG04L65-1

L722-2002-WG001545-01 6/15/05 1159 X X X X X X X X X X X X X

mm001-NC001505-01 6/15/05 1908 X X X X X X X X X X

ANSWER SHEET FOR THE 1990 CENSUS OF POPULATION

2

ANSWER

8.21

ANSWER SHEET FOR THE 1990 CENSUS OF POPULATION AND HOUSING

ANSWER SHEET FOR THE 1990 CENSUS OF POPULATION AND HOUSING

*Possible hazard identification*

<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input type="checkbox"/> Unknown	<input type="checkbox"/> Return To Client	<input type="checkbox"/> Disposal By Lab	<input type="checkbox"/> Archive For _____ Months	(A fee may be assessed if samples are retained longer than 1 month)
Sample Disposal								

**Turn Around Time Required** \_\_\_\_\_  
**QC Requirements (Specify)** \_\_\_\_\_

Date Received By \_\_\_\_\_ Time \_\_\_\_\_  
 1. Relinquished By \_\_\_\_\_

6/6/03 6:35  
Date Time  
2 Received By  
2 Beginning of Rx

Date 6/6/85 Time 13  
L. number 1345  
C. name Verne Fochillo

3. Relinquished By	<i>[Signature]</i>	Date	10/15/05	Time	14:30
3. Received By	<i>[Signature]</i>	Date	10/15/05	Time	14:30

Comments: ~~10-15% of patients will have side effects~~

DISTRIBUTION: WHITE: Returned to Client with Report. CANARY: Stays with the Sammle. PINK: Field Conv

CHINESE INVESTMENT IN THE UNITED STATES 11

Chain of Custody Number <b>220247</b>	Page <b>1</b> of <b>1</b>	Special Instructions/ Conditions of Receipt <i>(See Comments)</i>
--	---------------------------	---

Sample Disposal						(Fee may be assessed if samples are retained longer than 1 month)		
Possible Hazard Identification			GC Requirements (Specify)			Date	Type	Date
<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Unknown	<input type="checkbox"/> Poison B	<input type="checkbox"/> Return To Client	<input type="checkbox"/> Disposal By Lab	<input type="checkbox"/> Archive For	Months
Turn Around Time Required			Other					
<input type="checkbox"/> 24 Hours	<input type="checkbox"/> 48 Hours	<input checked="" type="checkbox"/> 7 Days	<input type="checkbox"/> 14 Days	<input type="checkbox"/> 21 Days	<input type="checkbox"/> Other			
1. Relinquished By <u>Stephen A. Gymnfi</u> 2. Requested By <u>John Lachlan</u>			Date	6/16/05	Time	2300	1. Received By <u>Jerome Kochilly</u>	Date
			Date	6/16/05	Time	1345	2. Received By <u>Jerome Kochilly</u>	Date
			Date	6/16/05	Time	1430	3. Received By <u>John Lachlan</u>	Date
Comments <u>Labs to Filter (Dissolved Man GAN ETE)</u>								
DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy								

**STL LOS ANGELES - PROJECT RECEIPT CHECKLIST Date: 6-16-05**

LIMS Lot #: ESF170101

Quote #: 48755

Client Name: Arcadis AGM

Project: Boeing C-6

Received by: ML

Date/Time Received: 6-16-05 / 14:30

Delivered by:  Client  STL  DHL  Fed Ex  UPS  Other

		Initial / Date
Custody Seal Status Cooler:	<input type="checkbox"/> Intact <input type="checkbox"/> Broken <input checked="" type="checkbox"/> None	<u>16-6-16-05</u>
Custody Seal Status Samples:	<input type="checkbox"/> Intact <input type="checkbox"/> Broken <input checked="" type="checkbox"/> None	
Custody Seal #(s):	<input checked="" type="checkbox"/> No Seal #	
Sampler Signature on COC	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A ...
IR Gun # <u>B</u> Correction Factor <u>+ .4</u> °C	IR passed daily verification <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Temperature - BLANK <u>2.4</u> °C +/- <u>.4</u> CF = <u>3.0</u> °C		
Temperature - COOLER ( <u>  </u> °C <u>  </u> °C <u>  </u> °C <u>  </u> °C) = <u>  </u> avg °C +/- <u>  </u> CF = <u>  </u> °C		
Samples outside temperature criteria but received within 6 hours of final sampling	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A	
Sample Container(s): <input checked="" type="checkbox"/> STL-LA <input type="checkbox"/> Client		
One COC/Multiple coolers: <input type="checkbox"/> Yes- # coolers <u>  </u> All within temp criteria <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> N/A		
One or more coolers with an anomaly: <input checked="" type="checkbox"/> Yes - (fill out PRC for each)		<input type="checkbox"/> N/A ...
Samples: <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Broken <input type="checkbox"/> Other		
pH measured: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Anomaly (if checked, notify lab and file NCM)		<input type="checkbox"/> N/A ..
Anomalies: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes - complete CUR and Create NCM NCM # <u>  </u>		
Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A		
Labeled by: <u>ML</u>	Labeling checked	
Turn Around Time: <input type="checkbox"/> RUSH-24HR <input type="checkbox"/> RUSH-48HR <input type="checkbox"/> RUSH-72HR <input checked="" type="checkbox"/> NORMAL		
Short-Hold Notification: <input type="checkbox"/> pH <input checked="" type="checkbox"/> Wet Chem <input checked="" type="checkbox"/> Metals (Filter/Pres) <input type="checkbox"/> Encore <input type="checkbox"/> >1/2 HT expired...		
Outside Analysis(es) (Test/Lab/Date Sent Out): <u>N/A</u>		
***** LEAVE NO BLANK SPACES ; USE N/A *****		

Headspace Anomaly						<input type="checkbox"/> N/A <u>16-6-16-05</u>
Lab ID	Container(s) #	Headspace	Lab ID	Container(s) #	Headspace	
001	1	<input checked="" type="checkbox"/> > 6mm				<input type="checkbox"/> > 6mm
002	1	<input type="checkbox"/> > 6mm				<input type="checkbox"/> > 6mm
		<input checked="" type="checkbox"/> > 6mm				<input type="checkbox"/> > 6mm
		<input type="checkbox"/> > 6mm				<input type="checkbox"/> > 6mm
		<input type="checkbox"/> > 6mm				<input type="checkbox"/> > 6mm
		<input type="checkbox"/> > 6mm				<input type="checkbox"/> > 6mm
		<input type="checkbox"/> > 6mm				<input type="checkbox"/> > 6mm

LIMS Lot # E5F170101

## **PROJECT RECEIPT CHECKLIST Cont'd**

\* VOA with headspace/bubbles < 6mm

H: HCL, S: H<sub>2</sub>SO<sub>4</sub>, N: HNO<sub>3</sub>, V: VOA, SL, Sleeve, E: Encore, PB: Poly Bottle, CGB: Clear Glass Bottle, AGJ: Amber Glass Jar, T: Terracore AGB: Amber Glass Bottle, n/f/l:HNO<sub>3</sub>-Lab filtered, n/f:HNO<sub>3</sub>-Field filtered, znna: Zinc Acetate/Sodium Hydroxide, Na<sub>2</sub>s<sub>2</sub>o<sub>3</sub>: sodium thiosulfate

Condition Upon Receipt Anomaly Form		
<input type="checkbox"/> N/A <i>Me 6-16-05</i>		
<ul style="list-style-type: none"> <li><b>COOLERS</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Not Received (received COC only)</li> <li><input type="checkbox"/> Leaking</li> <li><input type="checkbox"/> Other:</li> </ul> </li>   <li><b>TEMPERATURE (SPECS <math>4 \pm 2^\circ\text{C}</math>)</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Cooler Temp(s)</li> <li><input type="checkbox"/> Temperature Blank(s)</li> </ul> </li>   <li><b>CONTAINERS</b> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Vials with Bubbles &gt; 6mm</li> <li><input type="checkbox"/> Leaking</li> <li><input type="checkbox"/> Broken</li> <li><input type="checkbox"/> Extra</li> <li><input type="checkbox"/> Without Labels</li> <li><input type="checkbox"/> Other:</li> </ul> </li>   <li><b>SAMPLES</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Samples NOT RECEIVED but listed on COC</li> <li><input type="checkbox"/> Samples received but NOT LISTED on COC</li> <li><input type="checkbox"/> Logged based on Label Information</li> <li><input type="checkbox"/> Logged based on info from other samples on COC</li> <li><input type="checkbox"/> Logged according to Work Plan</li> <li><input type="checkbox"/> Logged on HOLD UNTIL FURTHER NOTICE</li> </ul> </li> </ul>		
<ul style="list-style-type: none"> <li><b>CUSTODY SEALS (COOLER(S))</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> None</li> <li><input type="checkbox"/> Not Intact</li> <li><input type="checkbox"/> Other</li> </ul> </li>   <li><b>CHAIN OF CUSTODY (COC)</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Not relinquished by Client; No date/time relinquished</li> <li><input type="checkbox"/> Incomplete information provided</li> <li><input type="checkbox"/> Other      <input type="checkbox"/> COC not received – notify PM</li> </ul> </li>   <li><b>LABELS</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Not the same ID/info as in COC</li> <li><input type="checkbox"/> Incomplete Information</li> <li><input type="checkbox"/> Markings/Info illegible</li> <li><input type="checkbox"/> Torn</li> </ul> </li>   <li><input type="checkbox"/> Will be noted on COC—Client to send samples with new COC</li> <li><input type="checkbox"/> Mislabeled as to tests, preservatives, etc.</li> <li><input type="checkbox"/> Holding time expired – list sample ID and test</li> <li><input type="checkbox"/> Improper container used</li> <li><input type="checkbox"/> Not preserved/Improper preservative used</li> <li><input type="checkbox"/> Improper pH _____ Lab to preserve sample and document</li> <li><input type="checkbox"/> Insufficient quantities for analysis      <input type="checkbox"/> Other</li> </ul>		
<p>Comments:</p> <p><i>Received VOA vials with headspace &gt;6mm for Sample #1, container #1; Sample #2, container #1.</i></p> <hr/> <hr/> <hr/> <hr/>		
<p><input type="checkbox"/> Corrective Action Implemented:</p> <p><input type="checkbox"/> Client Informed: verbally on _____ By: _____ <input type="checkbox"/> In writing on _____ By: _____</p> <p><input type="checkbox"/> Sample(s) on hold until: _____ <input type="checkbox"/> Sample(s) processed "as is,"</p>		
<p>Logged by/Date: <i>Me 6-16-05</i></p> <p>PM Review/Date: <i>me 6/17/05</i></p>		

SEVERN  
TRENT

STL

# Analytical Report

## EXECUTIVE SUMMARY - Detection Highlights

**E5F170101**

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
<b>IRZMW004_WG061505_01 06/15/05 16:25</b>	<b>002</b>			
Manganese - DISSOLVED	0.21 J	0.015	mg/L	SW846 6010B
Manganese	0.23	0.015	mg/L	SW846 6010B
Iron	2.2	0.10	mg/L	SW846 6010B
Chloroform	83 J	120	ug/L	SW846 8260B
1,1-Dichloroethene	110 J	120	ug/L	SW846 8260B
cis-1,2-Dichloroethene	840	120	ug/L	SW846 8260B
Trichloroethene	7100	120	ug/L	SW846 8260B
Chloride	284	10.0	mg/L	MCAWW 300.0A
Sulfate	38.1	1.0	mg/L	MCAWW 300.0A
Nitrate as N	6.3	0.10	mg/L	MCAWW 300.0A
Total Organic Carbon (TOC)	23.5	1.0	mg/L	SW846 9060
Bromide	0.79	0.50	mg/L	MCAWW 300.0A
<b>IRZCMW002_WG061505_01 06/15/05 17:59</b>	<b>003</b>			
Manganese - DISSOLVED	2.4 J	0.015	mg/L	SW846 6010B
Manganese	2.8	0.015	mg/L	SW846 6010B
Iron	1.2	0.10	mg/L	SW846 6010B
2-Butanone	210 J	250	ug/L	SW846 8260B
Carbon disulfide	36 J	50	ug/L	SW846 8260B
1,1-Dichloroethene	32 J	50	ug/L	SW846 8260B
cis-1,2-Dichloroethene	4800	50	ug/L	SW846 8260B
trans-1,2-Dichloroethene	25 J	50	ug/L	SW846 8260B
Trichloroethene	87	50	ug/L	SW846 8260B
Chloride	152	10.0	mg/L	MCAWW 300.0A
Sulfate	3.6	1.0	mg/L	MCAWW 300.0A
Total Organic Carbon (TOC)	157	10.0	mg/L	SW846 9060
Bromide	0.19 B	0.50	mg/L	MCAWW 300.0A
<b>CMW001_WG061505_01 06/15/05 19:08</b>	<b>004</b>			
Manganese - DISSOLVED	0.21 J	0.015	mg/L	SW846 6010B
Manganese	0.23	0.015	mg/L	SW846 6010B
Iron	0.16	0.10	mg/L	SW846 6010B
Chlorobenzene	9000	120	ug/L	SW846 8260B
Chloride	87.8	5.0	mg/L	MCAWW 300.0A
Sulfate	99.0	5.0	mg/L	MCAWW 300.0A
Total Organic Carbon (TOC)	15.8	1.0	mg/L	SW846 9060
Bromide	0.22 B	0.50	mg/L	MCAWW 300.0A

(Continued on next page)

## **EXECUTIVE SUMMARY - Detection Highlights**

**E5F170101**

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
<b>CMW002_WG061505_01 06/15/05 20:08 005</b>				
Manganese - DISSOLVED	0.13 J	0.015	mg/L	SW846 6010B
Manganese	0.15	0.015	mg/L	SW846 6010B
Iron	0.18	0.10	mg/L	SW846 6010B
Benzene	50 J	100	ug/L	SW846 8260B
Chlorobenzene	7400	100	ug/L	SW846 8260B
Trichloroethene	430	100	ug/L	SW846 8260B
Chloride	110	5.0	mg/L	MCAWW 300.0A
Sulfate	89.1	5.0	mg/L	MCAWW 300.0A
Total Organic Carbon (TOC)	13.3	1.0	mg/L	SW846 9060
Bromide	0.24 B	0.50	mg/L	MCAWW 300.0A

## METHODS SUMMARY

E5F170101

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
Bromide	MCAWW 300.0A	MCAWW 300.0A
Chloride	MCAWW 300.0A	MCAWW 300.0A
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3005A
Nitrate as N	MCAWW 300.0A	MCAWW 300.0A
Nitrite as N	MCAWW 300.0A	MCAWW 300.0A
Sulfate	MCAWW 300.0A	MCAWW 300.0A
Total Organic Carbon	SW846 9060	SW846 9060
Volatile Organics by GC/MS	SW846 8260B	SW846 5030B/826

### References:

- MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.
- SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

## SAMPLE SUMMARY

**E5F170101**

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
HDR05	001	TRIP BLANK_WG061505_01	06/15/05	
HDR06	002	IRZMW004_WG061505_01	06/15/05	16:25
HDR07	003	IRZCMW002_WG061505_01	06/15/05	17:59
HDR08	004	CMW001_WG061505_01	06/15/05	19:08
HDR09	005	CMW002_WG061505_01	06/15/05	20:08

**NOTE(S) :**

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

## ARCADIS Geraghty &amp; Miller, Inc.

Client Sample ID: TRIP BLANK\_WG061505\_01

## GC/MS Volatiles

Lot-Sample #....: E5F170101-001    Work Order #....: HDR051AA    Matrix.....: WG  
 Date Sampled....: 06/15/05    Date Received...: 06/16/05 14:30 MS Run #.....: 5171380  
 Prep Date.....: 06/17/05    Analysis Date...: 06/17/05  
 Prep Batch #....: 5171669    Analysis Time...: 19:21  
 Dilution Factor: 1  
 Analyst ID.....: 015590    Instrument ID...: MSQ  
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acetone	ND	1.0	ug/L	3.0
Benzene	ND	1.0	ug/L	0.30
Bromobenzene	ND	1.0	ug/L	0.30
Bromochloromethane	ND	1.0	ug/L	0.30
Bromoform	ND	1.0	ug/L	0.30
Bromomethane	ND	2.0	ug/L	1.0
2-Butanone	ND	5.0	ug/L	3.0
n-Butylbenzene	ND	1.0	ug/L	0.30
sec-Butylbenzene	ND	1.0	ug/L	0.30
tert-Butylbenzene	ND	1.0	ug/L	0.20
Carbon disulfide	ND	1.0	ug/L	0.30
Carbon tetrachloride	ND	1.0	ug/L	0.30
Chlorobenzene	ND	1.0	ug/L	0.30
Dibromochloromethane	ND	1.0	ug/L	0.40
Bromodichloromethane	ND	1.0	ug/L	0.30
Chloroethane	ND	2.0	ug/L	0.30
Chloroform	ND	1.0	ug/L	0.30
Chloromethane	ND	2.0	ug/L	0.30
2-Chlorotoluene	ND	1.0	ug/L	0.30
4-Chlorotoluene	ND	1.0	ug/L	0.30
1,2-Dibromo-3-chloropropane	ND	2.0	ug/L	0.70
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	0.30
Dibromomethane	ND	1.0	ug/L	0.40
1,2-Dichlorobenzene	ND	1.0	ug/L	0.30
1,3-Dichlorobenzene	ND	1.0	ug/L	0.30
1,4-Dichlorobenzene	ND	1.0	ug/L	0.30
Dichlorodifluoromethane	ND	2.0	ug/L	0.40
1,1-Dichloroethane	ND	1.0	ug/L	0.20
1,2-Dichloroethane	ND	1.0	ug/L	0.40
1,1-Dichloroethene	ND	1.0	ug/L	0.30
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.30
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.30
1,2-Dichloropropane	ND	1.0	ug/L	0.30
1,3-Dichloropropane	ND	1.0	ug/L	0.40
2,2-Dichloropropane	ND	1.0	ug/L	0.30
1,1-Dichloropropene	ND	1.0	ug/L	0.30

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## ARCADIS Geraghty &amp; Miller, Inc.

Client Sample ID: TRIP BLANK\_WG061505\_01

## GC/MS Volatiles

Lot-Sample #....: E5F170101-001 Work Order #....: HDR051AA Matrix.....: WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.30
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.50
Ethylbenzene	ND	1.0	ug/L	0.20
Hexachlorobutadiene	ND	1.0	ug/L	0.30
2-Hexanone	ND	5.0	ug/L	3.0
Isopropylbenzene	ND	1.0	ug/L	0.30
p-Isopropyltoluene	ND	1.0	ug/L	0.30
Methylene chloride	ND	1.0	ug/L	0.30
4-Methyl-2-pentanone	ND	5.0	ug/L	3.0
Methyl tert-butyl ether	ND	1.0	ug/L	0.50
Naphthalene	ND	1.0	ug/L	0.50
n-Propylbenzene	ND	1.0	ug/L	0.40
Styrene	ND	1.0	ug/L	0.30
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.30
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.40
Tetrachloroethene	ND	1.0	ug/L	0.30
Toluene	ND	1.0	ug/L	0.30
1,2,3-Trichlorobenzene	ND	1.0	ug/L	0.40
1,2,4-Trichloro- benzene	ND	1.0	ug/L	0.30
1,1,1-Trichloroethane	ND	1.0	ug/L	0.20
1,1,2-Trichloroethane	ND	1.0	ug/L	0.30
Trichloroethene	ND	1.0	ug/L	0.30
Trichlorofluoromethane	ND	2.0	ug/L	0.30
1,2,3-Trichloropropane	ND	1.0	ug/L	0.40
1,1,2-Trichlorotrifluoro- ethane	ND	1.0	ug/L	0.40
1,2,4-Trimethylbenzene	ND	1.0	ug/L	0.30
1,3,5-Trimethylbenzene	ND	1.0	ug/L	0.20
Vinyl chloride	ND	1.0	ug/L	0.30
m-Xylene & p-Xylene	ND	1.0	ug/L	0.50
o-Xylene	ND	1.0	ug/L	0.20
Xylenes (total)	ND	1.0	ug/L	0.80
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS		
Bromofluorobenzene	96	(75 - 130)		
1,2-Dichloroethane-d4	124	(65 - 135)		
Toluene-d8	101	(80 - 130)		

## ARCADIS Geraghty &amp; Miller, Inc.

Client Sample ID: IRZMW004\_WG061505\_01

## GC/MS Volatiles

Lot-Sample #....: E5F170101-002 Work Order #....: HDR061AL Matrix.....: WG  
 Date Sampled....: 06/15/05 16:25 Date Received...: 06/16/05 14:30 MS Run #.....: 5172359  
 Prep Date.....: 06/20/05 Analysis Date...: 06/20/05  
 Prep Batch #....: 5172578 Analysis Time...: 22:50  
 Dilution Factor: 125  
 Analyst ID.....: 015590 Instrument ID...: MSR  
 Method.....: SW846 8260B

## REPORTING

PARAMETER	RESULT	LIMIT	UNITS	MDL
Acetone	ND	1200	ug/L	380
Benzene	ND	120	ug/L	38
Bromobenzene	ND	120	ug/L	38
Bromochloromethane	ND	120	ug/L	38
Bromoform	ND	120	ug/L	38
Bromomethane	ND	250	ug/L	120
2-Butanone	ND	620	ug/L	380
n-Butylbenzene	ND	120	ug/L	38
sec-Butylbenzene	ND	120	ug/L	38
tert-Butylbenzene	ND	120	ug/L	25
Carbon disulfide	ND	120	ug/L	38
Carbon tetrachloride	ND	120	ug/L	38
Chlorobenzene	ND	120	ug/L	38
Dibromochloromethane	ND	120	ug/L	50
Bromodichloromethane	ND	120	ug/L	38
Chloroethane	ND	250	ug/L	38
Chloroform	83 J	120	ug/L	38
Chloromethane	ND	250	ug/L	38
2-Chlorotoluene	ND	120	ug/L	38
4-Chlorotoluene	ND	120	ug/L	38
1,2-Dibromo-3-chloro-propane	ND	250	ug/L	88
1,2-Dibromoethane (EDB)	ND	120	ug/L	38
Dibromomethane	ND	120	ug/L	50
1,2-Dichlorobenzene	ND	120	ug/L	38
1,3-Dichlorobenzene	ND	120	ug/L	38
1,4-Dichlorobenzene	ND	120	ug/L	38
Dichlorodifluoromethane	ND	250	ug/L	50
1,1-Dichloroethane	ND	120	ug/L	25
1,2-Dichloroethane	ND	120	ug/L	50
1,1-Dichloroethene	110 J	120	ug/L	38
cis-1,2-Dichloroethene	840	120	ug/L	38
trans-1,2-Dichloroethene	ND	120	ug/L	38
1,2-Dichloropropane	ND	120	ug/L	38
1,3-Dichloropropane	ND	120	ug/L	50
2,2-Dichloropropane	ND	120	ug/L	38
1,1-Dichloropropene	ND	120	ug/L	38

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## ARCADIS Geraghty &amp; Miller, Inc.

Client Sample ID: IRZMW004\_WG061505\_01

## GC/MS Volatiles

Lot-Sample #....: E5F170101-002 Work Order #....: HDR061AL Matrix.....: WG

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
cis-1,3-Dichloropropene	ND	120	ug/L	38
trans-1,3-Dichloropropene	ND	120	ug/L	62
Ethylbenzene	ND	120	ug/L	25
Hexachlorobutadiene	ND	120	ug/L	38
2-Hexanone	ND	620	ug/L	380
Isopropylbenzene	ND	120	ug/L	38
p-Isopropyltoluene	ND	120	ug/L	38
Methylene chloride	ND	120	ug/L	38
4-Methyl-2-pentanone	ND	620	ug/L	380
Methyl tert-butyl ether	ND	120	ug/L	62
Naphthalene	ND	120	ug/L	62
n-Propylbenzene	ND	120	ug/L	50
Styrene	ND	120	ug/L	38
1,1,1,2-Tetrachloroethane	ND	120	ug/L	38
1,1,2,2-Tetrachloroethane	ND	120	ug/L	50
Tetrachloroethene	ND	120	ug/L	38
Toluene	ND	120	ug/L	38
1,2,3-Trichlorobenzene	ND	120	ug/L	50
1,2,4-Trichloro- benzene	ND	120	ug/L	38
1,1,1-Trichloroethane	ND	120	ug/L	25
1,1,2-Trichloroethane	ND	120	ug/L	38
Trichloroethene	7100	120	ug/L	38
Trichlorofluoromethane	ND	250	ug/L	38
1,2,3-Trichloropropane	ND	120	ug/L	50
1,1,2-Trichlorotrifluoro- ethane	ND	120	ug/L	50
1,2,4-Trimethylbenzene	ND	120	ug/L	38
1,3,5-Trimethylbenzene	ND	120	ug/L	25
Vinyl chloride	ND	120	ug/L	38
m-Xylene & p-Xylene	ND	120	ug/L	62
o-Xylene	ND	120	ug/L	25
Xylenes (total)	ND	120	ug/L	100

SURROGATE	PERCENT RECOVERY	RECOVERY	
		LIMITS	
Bromofluorobenzene	97	(75	- 130)
1,2-Dichloroethane-d4	114	(65	- 135)
Toluene-d8	108	(80	- 130)

NOTE(S) :

J Estimated result. Result is less than RL.

**ARCADIS Geraghty & Miller, Inc.**

**Client Sample ID: IRZMW004\_WG061505\_01**

**TOTAL Metals**

**Lot-Sample #....: E5F170101-002**

**Matrix.....: WG**

**Date Sampled....: 06/15/05 16:25 Date Received...: 06/16/05 14:30**

<b>PARAMETER</b>	<b>RESULT</b>	<b>REPORTING</b>			<b>METHOD</b>	<b>PREPARATION-</b>	<b>WORK</b>
		<b>LIMIT</b>	<b>UNITS</b>	<b>ANALYSIS DATE</b>			
<b>Prep Batch #....: 5172210</b>							
Manganese	0.23	0.015	mg/L	SW846 6010B	06/21-06/22/05	HDR061AJ	
		Dilution Factor: 1		Analysis Time...: 13:06	Analyst ID.....:	021088	
		Instrument ID...: M01		MS Run #.....: 5173249	MDL.....:	0.0010	
Iron	2.2	0.10	mg/L	SW846 6010B	06/21-06/22/05	HDR061AM	
		Dilution Factor: 1		Analysis Time...: 13:06	Analyst ID.....:	021088	
		Instrument ID...: M01		MS Run #.....: 5173249	MDL.....:	0.030	

**ARCADIS Geraghty & Miller, Inc.**

**Client Sample ID: IRZMW004\_WG061505\_01**

**DISSOLVED Metals**

**Lot-Sample #....: E5F170101-002**

**Matrix.....: WG**

**Date Sampled....: 06/15/05 16:25 Date Received...: 06/16/05 14:30**

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK	ANALYSIS DATE	ORDER #
		LIMIT	UNITS						
<b>Prep Batch #....: 5168217</b>									
Manganese	0.21 J	0.015	mg/L		SW846 6010B	06/20-06/21/05	HDR061AH		
		Dilution Factor: 1			Analysis Time...: 12:52		Analyst ID.....: 021088		
		Instrument ID..: M01			MS Run #.....: 5168147		MDL.....: 0.0010		

**NOTE(S) :**

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

## ARCADIS Geraghty &amp; Miller, Inc.

Client Sample ID: IRZMW004\_WG061505\_01

## General Chemistry

Lot-Sample #....: E5F170101-002    Work Order #....: HDR06    Matrix.....: WG  
 Date Sampled....: 06/15/05 16:25    Date Received...: 06/16/05 14:30

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-		PREP BATCH #
					ANALYSIS DATE		
Bromide	0.79	0.50	mg/L	MCAWW 300.0A	06/17/05		5168091
		Dilution Factor: 1		Analysis Time...: 07:00		Analyst ID.....: 000022	
		Instrument ID...: W01		MS Run #.....: 5168054		MDL.....: 0.10	
Chloride	284	10.0	mg/L	MCAWW 300.0A	06/17/05		5168088
		Dilution Factor: 10		Analysis Time...: 09:57		Analyst ID.....: 0000224	
		Instrument ID...: W01		MS Run #.....: 5168052		MDL.....: 3.0	
Nitrate as N	6.3	0.10	mg/L	MCAWW 300.0A	06/17/05		5168093
		Dilution Factor: 1		Analysis Time...: 07:00		Analyst ID.....: 0000222	
		Instrument ID...: W01		MS Run #.....: 5168055		MDL.....: 0.030	
Nitrite as N	ND G	1.0	mg/L	MCAWW 300.0A	06/17/05		5168090
		Dilution Factor: 10		Analysis Time...: 09:57		Analyst ID.....: 0000225	
		Instrument ID...: W01		MS Run #.....: 5168053		MDL.....: 0.30	
Sulfate	38.1	1.0	mg/L	MCAWW 300.0A	06/17/05		5168094
		Dilution Factor: 1		Analysis Time...: 07:00		Analyst ID.....: 0000223	
		Instrument ID...: W01		MS Run #.....: 5168056		MDL.....: 0.20	
Total Organic Carbon (TOC)	23.5	1.0	mg/L	SW846 9060	06/17/05		5171406
		Dilution Factor: 1		Analysis Time...: 19:30		Analyst ID.....: 9999956	
		Instrument ID...: W08		MS Run #.....: 5171311		MDL.....: 0.40	

NOTE(S) :

RL Reporting Limit

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

## ARCADIS Geraghty &amp; Miller, Inc.

Client Sample ID: IRZCMW002\_WG061505\_01

## GC/MS Volatiles

Lot-Sample #....: E5F170101-003 Work Order #....: HDR071AL Matrix.....: WG  
 Date Sampled...: 06/15/05 17:59 Date Received...: 06/16/05 14:30 MS Run #.....: 5171380  
 Prep Date.....: 06/17/05 Analysis Date...: 06/17/05  
 Prep Batch #....: 5171669 Analysis Time...: 22:51  
 Dilution Factor: 50  
 Analyst ID.....: 015590 Instrument ID...: MSQ  
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acetone	ND	500	ug/L	150
Benzene	ND	50	ug/L	15
Bromobenzene	ND	50	ug/L	15
Bromochloromethane	ND	50	ug/L	15
Bromoform	ND	50	ug/L	15
Bromomethane	ND	100	ug/L	50
2-Butanone	210 J	250	ug/L	150
n-Butylbenzene	ND	50	ug/L	15
sec-Butylbenzene	ND	50	ug/L	15
tert-Butylbenzene	ND	50	ug/L	10
Carbon disulfide	36 J	50	ug/L	15
Carbon tetrachloride	ND	50	ug/L	15
Chlorobenzene	ND	50	ug/L	15
Dibromochloromethane	ND	50	ug/L	20
Bromodichloromethane	ND	50	ug/L	15
Chloroethane	ND	100	ug/L	15
Chloroform	ND	50	ug/L	15
Chloromethane	ND	100	ug/L	15
2-Chlorotoluene	ND	50	ug/L	15
4-Chlorotoluene	ND	50	ug/L	15
1,2-Dibromo-3-chloropropane	ND	100	ug/L	35
1,2-Dibromoethane (EDB)	ND	50	ug/L	15
Dibromomethane	ND	50	ug/L	20
1,2-Dichlorobenzene	ND	50	ug/L	15
1,3-Dichlorobenzene	ND	50	ug/L	15
1,4-Dichlorobenzene	ND	50	ug/L	15
Dichlorodifluoromethane	ND	100	ug/L	20
1,1-Dichloroethane	ND	50	ug/L	10
1,2-Dichloroethane	ND	50	ug/L	20
1,1-Dichloroethene	32 J	50	ug/L	15
cis-1,2-Dichloroethene	4800	50	ug/L	15
trans-1,2-Dichloroethene	25 J	50	ug/L	15
1,2-Dichloropropane	ND	50	ug/L	15
1,3-Dichloropropane	ND	50	ug/L	20
2,2-Dichloropropane	ND	50	ug/L	15
1,1-Dichloropropene	ND	50	ug/L	15

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## ARCADIS Geraghty &amp; Miller, Inc.

Client Sample ID: IRZCMW002\_WG061505\_01

## GC/MS Volatiles

Lot-Sample #....: E5F170101-003 Work Order #....: HDR071AL Matrix.....: WG

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		
		<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
cis-1,3-Dichloropropene	ND	50	ug/L	15
trans-1,3-Dichloropropene	ND	50	ug/L	25
Ethylbenzene	ND	50	ug/L	10
Hexachlorobutadiene	ND	50	ug/L	15
2-Hexanone	ND	250	ug/L	150
Isopropylbenzene	ND	50	ug/L	15
p-Isopropyltoluene	ND	50	ug/L	15
Methylene chloride	ND	50	ug/L	15
4-Methyl-2-pentanone	ND	250	ug/L	150
Methyl tert-butyl ether	ND	50	ug/L	25
Naphthalene	ND	50	ug/L	25
n-Propylbenzene	ND	50	ug/L	20
Styrene	ND	50	ug/L	15
1,1,1,2-Tetrachloroethane	ND	50	ug/L	15
1,1,2,2-Tetrachloroethane	ND	50	ug/L	20
Tetrachloroethene	ND	50	ug/L	15
Toluene	ND	50	ug/L	15
1,2,3-Trichlorobenzene	ND	50	ug/L	20
1,2,4-Trichloro- benzene	ND	50	ug/L	15
1,1,1-Trichloroethane	ND	50	ug/L	10
1,1,2-Trichloroethane	ND	50	ug/L	15
<b>Trichloroethene</b>	<b>87</b>	<b>50</b>	<b>ug/L</b>	<b>15</b>
Trichlorofluoromethane	ND	100	ug/L	15
1,2,3-Trichloropropane	ND	50	ug/L	20
1,1,2-Trichlorotrifluoro- ethane	ND	50	ug/L	20
1,2,4-Trimethylbenzene	ND	50	ug/L	15
1,3,5-Trimethylbenzene	ND	50	ug/L	10
Vinyl chloride	ND	50	ug/L	15
m-Xylene & p-Xylene	ND	50	ug/L	25
o-Xylene	ND	50	ug/L	10
Xylenes (total)	ND	50	ug/L	40
<u>SURROGATE</u>		<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
Bromofluorobenzene	92	(75 - 130)		
1,2-Dichloroethane-d4	120	(65 - 135)		
Toluene-d8	98	(80 - 130)		

NOTE(S):

J Estimated result. Result is less than RL.

**ARCADIS Geraghty & Miller, Inc.**

**Client Sample ID: IRZCMW002\_WG061505\_01**

**TOTAL Metals**

**Lot-Sample #....: E5F170101-003** **Matrix.....: WG**  
**Date Sampled....: 06/15/05 17:59** **Date Received..: 06/16/05 14:30**

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS	ANALYSIS DATE			
<b>Prep Batch #....: 5172210</b>							
Manganese	2.8	0.015	mg/L	SW846 6010B	06/21-06/22/05	HDR071AJ	
		Dilution Factor: 1		Analysis Time..: 13:13	Analyst ID.....:	021088	
		Instrument ID...: M01		MS Run #.....: 5173249	MDL.....:	0.0010	
Iron	1.2	0.10	mg/L	SW846 6010B	06/21-06/22/05	HDR071AM	
		Dilution Factor: 1		Analysis Time..: 13:13	Analyst ID.....:	021088	
		Instrument ID...: M01		MS Run #.....: 5173249	MDL.....:	0.030	

**ARCADIS Geraghty & Miller, Inc.**

**Client Sample ID: IRZCMW002\_WG061505\_01**

**DISSOLVED Metals**

**Lot-Sample #....: E5F170101-003**

**Date Sampled....: 06/15/05 17:59 Date Received...: 06/16/05 14:30**

**Matrix.....: WG**

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK	ORDER #
		LIMIT	UNITS					
<b>Prep Batch #....: 5168217</b>								
Manganese	2.4 J	0.015	mg/L		SW846 6010B	06/20-06/21/05 HDR071AH		
		Dilution Factor: 1			Analysis Time...: 12:59	Analyst ID.....: 021088		
		Instrument ID..: M01			MS Run #.....: 5168147	MDL.....: 0.0010		

**NOTE(S) :**

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

## ARCADIS Geraghty &amp; Miller, Inc.

Client Sample ID: IRZCMW002\_WG061505\_01

## General Chemistry

Lot-Sample #....: E5F170101-003 Work Order #....: HDR07 Matrix.....: WG  
 Date Sampled....: 06/15/05 17:59 Date Received...: 06/16/05 14:30

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Bromide	0.19 B	0.50	mg/L	MCAWW 300.0A	06/17/05	5168091
		Dilution Factor: 1		Analysis Time...: 07:16	Analyst ID.....: 0000221	
		Instrument ID...: W01		MS Run #.....: 5168054	MDL.....: 0.10	
Chloride	152	10.0	mg/L	MCAWW 300.0A	06/17/05	5168088
		Dilution Factor: 10		Analysis Time...: 10:13	Analyst ID.....: 0000224	
		Instrument ID...: W01		MS Run #.....: 5168052	MDL.....: 3.0	
Nitrate as N	ND	0.10	mg/L	MCAWW 300.0A	06/17/05	5168093
		Dilution Factor: 1		Analysis Time...: 07:16	Analyst ID.....: 0000222	
		Instrument ID...: W01		MS Run #.....: 5168055	MDL.....: 0.030	
Nitrite as N	ND G	1.0	mg/L	MCAWW 300.0A	06/17/05	5168090
		Dilution Factor: 10		Analysis Time...: 10:13	Analyst ID.....: 0000225	
		Instrument ID...: W01		MS Run #.....: 5168053	MDL.....: 0.30	
Sulfate	3.6	1.0	mg/L	MCAWW 300.0A	06/17/05	5168094
		Dilution Factor: 1		Analysis Time...: 07:16	Analyst ID.....: 0000223	
		Instrument ID...: W01		MS Run #.....: 5168056	MDL.....: 0.20	
Total Organic Carbon 157 (TOC)	10.0	mg/L		SW846 9060	06/20/05	5171639
		Dilution Factor: 10		Analysis Time...: 17:55	Analyst ID.....: 9999956	
		Instrument ID...: W08		MS Run #.....: 5172119	MDL.....: 4.0	

NOTE(S) :

RL Reporting Limit

B Estimated result. Result is less than RL.

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

## ARCADIS Geraghty &amp; Miller, Inc.

Client Sample ID: CMW001\_WG061505\_01

## GC/MS Volatiles

Lot-Sample #....: E5F170101-004 Work Order #....: HDR081AL Matrix.....: WG  
 Date Sampled...: 06/15/05 19:08 Date Received...: 06/16/05 14:30 MS Run #.....: 5172359  
 Prep Date.....: 06/20/05 Analysis Date...: 06/21/05  
 Prep Batch #....: 5172578 Analysis Time...: 01:34  
 Dilution Factor: 125  
 Analyst ID.....: 015590 Instrument ID...: MSR  
 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Acetone	ND	1200	ug/L	380
Benzene	ND	120	ug/L	38
Bromobenzene	ND	120	ug/L	38
Bromochloromethane	ND	120	ug/L	38
Bromoform	ND	120	ug/L	38
Bromomethane	ND	250	ug/L	120
2-Butanone	ND	620	ug/L	380
n-Butylbenzene	ND	120	ug/L	38
sec-Butylbenzene	ND	120	ug/L	38
tert-Butylbenzene	ND	120	ug/L	25
Carbon disulfide	ND	120	ug/L	38
Carbon tetrachloride	ND	120	ug/L	38
Chlorobenzene	9000	120	ug/L	38
Dibromochloromethane	ND	120	ug/L	50
Bromodichloromethane	ND	120	ug/L	38
Chloroethane	ND	250	ug/L	38
Chloroform	ND	120	ug/L	38
Chloromethane	ND	250	ug/L	38
2-Chlorotoluene	ND	120	ug/L	38
4-Chlorotoluene	ND	120	ug/L	38
1,2-Dibromo-3-chloro-propane	ND	250	ug/L	88
1,2-Dibromoethane (EDB)	ND	120	ug/L	38
Dibromomethane	ND	120	ug/L	50
1,2-Dichlorobenzene	ND	120	ug/L	38
1,3-Dichlorobenzene	ND	120	ug/L	38
1,4-Dichlorobenzene	ND	120	ug/L	38
Dichlorodifluoromethane	ND	250	ug/L	50
1,1-Dichloroethane	ND	120	ug/L	25
1,2-Dichloroethane	ND	120	ug/L	50
1,1-Dichloroethene	ND	120	ug/L	38
cis-1,2-Dichloroethene	ND	120	ug/L	38
trans-1,2-Dichloroethene	ND	120	ug/L	38
1,2-Dichloropropane	ND	120	ug/L	38
1,3-Dichloropropane	ND	120	ug/L	50
2,2-Dichloropropane	ND	120	ug/L	38
1,1-Dichloropropene	ND	120	ug/L	38

(Continued on next page)

## ARCADIS Geraghty &amp; Miller, Inc.

Client Sample ID: CMW001\_WG061505\_01

## GC/MS Volatiles

Lot-Sample #....: E5F170101-004 Work Order #....: HDR081AL Matrix.....: WG

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
cis-1,3-Dichloropropene	ND	120	ug/L	38
trans-1,3-Dichloropropene	ND	120	ug/L	62
Ethylbenzene	ND	120	ug/L	25
Hexachlorobutadiene	ND	120	ug/L	38
2-Hexanone	ND	620	ug/L	380
Isopropylbenzene	ND	120	ug/L	38
p-Isopropyltoluene	ND	120	ug/L	38
Methylene chloride	ND	120	ug/L	38
4-Methyl-2-pentanone	ND	620	ug/L	380
Methyl tert-butyl ether	ND	120	ug/L	62
Naphthalene	ND	120	ug/L	62
n-Propylbenzene	ND	120	ug/L	50
Styrene	ND	120	ug/L	38
1,1,1,2-Tetrachloroethane	ND	120	ug/L	38
1,1,2,2-Tetrachloroethane	ND	120	ug/L	50
Tetrachloroethene	ND	120	ug/L	38
Toluene	ND	120	ug/L	38
1,2,3-Trichlorobenzene	ND	120	ug/L	50
1,2,4-Trichloro- benzene	ND	120	ug/L	38
1,1,1-Trichloroethane	ND	120	ug/L	25
1,1,2-Trichloroethane	ND	120	ug/L	38
Trichloroethene	ND	120	ug/L	38
Trichlorofluoromethane	ND	250	ug/L	38
1,2,3-Trichloropropane	ND	120	ug/L	50
1,1,2-Trichlorotrifluoro- ethane	ND	120	ug/L	50
1,2,4-Trimethylbenzene	ND	120	ug/L	38
1,3,5-Trimethylbenzene	ND	120	ug/L	25
Vinyl chloride	ND	120	ug/L	38
m-Xylene & p-Xylene	ND	120	ug/L	62
o-Xylene	ND	120	ug/L	25
Xylenes (total)	ND	120	ug/L	100
SURROGATE	RECOVERY	PERCENT RECOVERY		
		LIMITS		
Bromofluorobenzene	98	(75 - 130)		
1,2-Dichloroethane-d4	119	(65 - 135)		
Toluene-d8	107	(80 - 130)		

**ARCADIS Geraghty & Miller, Inc.**

**Client Sample ID: CMW001\_WG061505\_01**

**TOTAL Metals**

**Lot-Sample #....: E5F170101-004** **Matrix.....: WG**  
**Date Sampled....: 06/15/05 19:08** **Date Received...: 06/16/05 14:30**

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS	ANALYSIS DATE			
<b>Prep Batch #....: 5172210</b>							
Manganese	0.23	0.015	mg/L	SW846 6010B	06/21-06/22/05	HDR081AJ	
		Dilution Factor: 1		Analysis Time...: 13:21	Analyst ID.....:	021088	
		Instrument ID...: M01		MS Run #.....: 5173249	MDL.....:	0.0010	
Iron	0.16	0.10	mg/L	SW846 6010B	06/21-06/22/05	HDR081AM	
		Dilution Factor: 1		Analysis Time...: 13:21	Analyst ID.....:	021088	
		Instrument ID...: M01		MS Run #.....: 5173249	MDL.....:	0.030	

**ARCADIS Geraghty & Miller, Inc.**

**Client Sample ID: CMW001\_WG061505\_01**

**DISSOLVED Metals**

**Lot-Sample #....: E5F170101-004**

**Matrix.....: WG**

**Date Sampled....: 06/15/05 19:08 Date Received..: 06/16/05 14:30**

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK	ORDER #
		LIMIT	UNITS					
Prep Batch #....:	5168217							
Manganese	0.21 J	0.015	mg/L		SW846 6010B	06/20-06/21/05 HDR081AH		
		Dilution Factor: 1			Analysis Time...: 13:07	Analyst ID.....: 021088		
		Instrument ID...: M01			MS Run #.....: 5168147	MDL.....: 0.0010		

**NOTE(S) :**

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

## ARCADIS Geraghty &amp; Miller, Inc.

Client Sample ID: CMW001\_WG061505\_01

## General Chemistry

Lot-Sample #....: E5F170101-004    Work Order #....: HDR08    Matrix.....: WG  
 Date Sampled....: 06/15/05 19:08    Date Received...: 06/16/05 14:30

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Bromide	0.22 B	0.50	mg/L	MCAWW 300.0A	06/17/05	5168091
		Dilution Factor: 1		Analysis Time...: 07:32	Analyst ID.....: 0000229	
		Instrument ID...: W01		MS Run #.....: 5168054	MDL.....: 0.10	
Chloride	87.8	5.0	mg/L	MCAWW 300.0A	06/17/05	5168088
		Dilution Factor: 5		Analysis Time...: 10:29	Analyst ID.....: 0000224	
		Instrument ID...: W01		MS Run #.....: 5168052	MDL.....: 1.5	
Nitrate as N	ND	0.10	mg/L	MCAWW 300.0A	06/17/05	5168093
		Dilution Factor: 1		Analysis Time...: 07:32	Analyst ID.....: 0000222	
		Instrument ID...: W01		MS Run #.....: 5168055	MDL.....: 0.030	
Nitrite as N	ND	0.10	mg/L	MCAWW 300.0A	06/17/05	5168090
		Dilution Factor: 1		Analysis Time...: 07:32	Analyst ID.....: 0000225	
		Instrument ID...: W01		MS Run #.....: 5168053	MDL.....: 0.030	
Sulfate	99.0	5.0	mg/L	MCAWW 300.0A	06/17/05	5168094
		Dilution Factor: 5		Analysis Time...: 10:29	Analyst ID.....: 0000223	
		Instrument ID...: W01		MS Run #.....: 5168056	MDL.....: 1.0	
Total Organic Carbon (TOC)	15.8	1.0	mg/L	SW846 9060	06/20/05	5171639
		Dilution Factor: 1		Analysis Time...: 17:55	Analyst ID.....: 9999956	
		Instrument ID...: W08		MS Run #.....: 5172119	MDL.....: 0.40	

**NOTE(S) :**

RL Reporting Limit

B Estimated result. Result is less than RL.

## ARCADIS Geraghty &amp; Miller, Inc.

Client Sample ID: CMW002\_WG061505\_01

## GC/MS Volatiles

Lot-Sample #....: E5F170101-005 Work Order #....: HDR091AL Matrix.....: WG  
 Date Sampled...: 06/15/05 20:08 Date Received...: 06/16/05 14:30 MS Run #....: 5172359  
 Prep Date.....: 06/20/05 Analysis Date...: 06/21/05  
 Prep Batch #...: 5172578 Analysis Time...: 01:58  
 Dilution Factor: 100  
 Analyst ID.....: 015590 Instrument ID...: MSR  
 Method.....: SW846 8260B

PARAMETER	REPORTING			
	RESULT	LIMIT	UNITS	MDL
Acetone	ND	1000	ug/L	300
Benzene	50 J	100	ug/L	30
Bromobenzene	ND	100	ug/L	30
Bromochloromethane	ND	100	ug/L	30
Bromoform	ND	100	ug/L	30
Bromomethane	ND	200	ug/L	100
2-Butanone	ND	500	ug/L	300
n-Butylbenzene	ND	100	ug/L	30
sec-Butylbenzene	ND	100	ug/L	30
tert-Butylbenzene	ND	100	ug/L	20
Carbon disulfide	ND	100	ug/L	30
Carbon tetrachloride	ND	100	ug/L	30
Chlorobenzene	7400	100	ug/L	30
Dibromochemicalmethane	ND	100	ug/L	40
Bromodichloromethane	ND	100	ug/L	30
Chloroethane	ND	200	ug/L	30
Chloroform	ND	100	ug/L	30
Chloromethane	ND	200	ug/L	30
2-Chlorotoluene	ND	100	ug/L	30
4-Chlorotoluene	ND	100	ug/L	30
1,2-Dibromo-3-chloro-propane	ND	200	ug/L	70
1,2-Dibromoethane (EDB)	ND	100	ug/L	30
Dibromomethane	ND	100	ug/L	40
1,2-Dichlorobenzene	ND	100	ug/L	30
1,3-Dichlorobenzene	ND	100	ug/L	30
1,4-Dichlorobenzene	ND	100	ug/L	30
Dichlorodifluoromethane	ND	200	ug/L	40
1,1-Dichloroethane	ND	100	ug/L	20
1,2-Dichloroethane	ND	100	ug/L	40
1,1-Dichloroethene	ND	100	ug/L	30
cis-1,2-Dichloroethene	ND	100	ug/L	30
trans-1,2-Dichloroethene	ND	100	ug/L	30
1,2-Dichloropropane	ND	100	ug/L	30
1,3-Dichloropropane	ND	100	ug/L	40
2,2-Dichloropropane	ND	100	ug/L	30
1,1-Dichloropropene	ND	100	ug/L	30

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## ARCADIS Geraghty &amp; Miller, Inc.

Client Sample ID: CMW002\_WG061505\_01

## GC/MS Volatiles

Lot-Sample #....: E5F170101-005 Work Order #....: HDR091AL Matrix.....: WG

PARAMETER	RESULT	REPORTING		MDL
		LIMIT	UNITS	
cis-1,3-Dichloropropene	ND	100	ug/L	30
trans-1,3-Dichloropropene	ND	100	ug/L	50
Ethylbenzene	ND	100	ug/L	20
Hexachlorobutadiene	ND	100	ug/L	30
2-Hexanone	ND	500	ug/L	300
Isopropylbenzene	ND	100	ug/L	30
p-Isopropyltoluene	ND	100	ug/L	30
Methylene chloride	ND	100	ug/L	30
4-Methyl-2-pentanone	ND	500	ug/L	300
Methyl tert-butyl ether	ND	100	ug/L	50
Naphthalene	ND	100	ug/L	50
n-Propylbenzene	ND	100	ug/L	40
Styrene	ND	100	ug/L	30
1,1,1,2-Tetrachloroethane	ND	100	ug/L	30
1,1,2,2-Tetrachloroethane	ND	100	ug/L	40
Tetrachloroethene	ND	100	ug/L	30
Toluene	ND	100	ug/L	30
1,2,3-Trichlorobenzene	ND	100	ug/L	40
1,2,4-Trichloro- benzene	ND	100	ug/L	30
1,1,1-Trichloroethane	ND	100	ug/L	20
1,1,2-Trichloroethane	ND	100	ug/L	30
Trichloroethene	430	100	ug/L	30
Trichlorofluoromethane	ND	200	ug/L	30
1,2,3-Trichloropropane	ND	100	ug/L	40
1,1,2-Trichlorotrifluoro- ethane	ND	100	ug/L	40
1,2,4-Trimethylbenzene	ND	100	ug/L	30
1,3,5-Trimethylbenzene	ND	100	ug/L	20
Vinyl chloride	ND	100	ug/L	30
m-Xylene & p-Xylene	ND	100	ug/L	50
o-Xylene	ND	100	ug/L	20
Xylenes (total)	ND	100	ug/L	80
 <u>SURROGATE</u>		PERCENT RECOVERY	RECOVERY LIMITS	
Bromofluorobenzene	102		(75 - 130)	
1,2-Dichloroethane-d4	117		(65 - 135)	
Toluene-d8	112		(80 - 130)	

NOTE(S) :

J Estimated result. Result is less than RL.

**ARCADIS Geraghty & Miller, Inc.**

**Client Sample ID: CMW002\_WG061505\_01**

**TOTAL Metals**

**Lot-Sample #....: E5F170101-005**

**Matrix.....: WG**

**Date Sampled....: 06/15/05 20:08 Date Received...: 06/16/05 14:30**

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
		LIMIT	UNITS				
<b>Prep Batch #....: 5172210</b>							
Manganese	0.15	0.015	mg/L	SW846 6010B	06/21-06/22/05	HDR091AJ	
		Dilution Factor: 1		Analysis Time...: 13:28	Analyst ID.....:	021088	
		Instrument ID...: M01		MS Run #.....: 5173249	MDL.....:	0.0010	
Iron	0.18	0.10	mg/L	SW846 6010B	06/21-06/22/05	HDR091AM	
		Dilution Factor: 1		Analysis Time...: 13:28	Analyst ID.....:	021088	
		Instrument ID...: M01		MS Run #.....: 5173249	MDL.....:	0.030	

**ARCADIS Geraghty & Miller, Inc.**

**Client Sample ID: CMW002\_WG061505\_01**

**DISSOLVED Metals**

**Lot-Sample #....: E5F170101-005**

**Matrix.....: WG**

**Date Sampled....: 06/15/05 20:08 Date Received...: 06/16/05 14:30**

<b>PARAMETER</b>	<b>RESULT</b>	<b>REPORTING</b>			<b>METHOD</b>	<b>PREPARATION-</b>	<b>WORK</b>
		<b>LIMIT</b>	<b>UNITS</b>	<b>ANALYSIS DATE</b>			
<b>Prep Batch #....: 5168217</b>							
<b>Manganese</b>	<b>0.13 J</b>	<b>0.015</b>	<b>mg/L</b>	<b>SW846 6010B</b>	<b>06/20-06/21/05</b>	<b>HDR091AH</b>	
				Dilution Factor: 1	Analysis Time..: 13:15	Analyst ID.....: 021088	
				Instrument ID...: M01	MS Run #.....: 5168147	MDL.....: 0.0010	

**NOTE(S) :**

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

## ARCADIS Geraghty &amp; Miller, Inc.

Client Sample ID: CMW002\_WG061505\_01

## General Chemistry

Lot-Sample #....: E5F170101-005 Work Order #....: HDR09 Matrix.....: WG  
 Date Sampled....: 06/15/05 20:08 Date Received..: 06/16/05 14:30

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Bromide	0.24 B	0.50	mg/L	MCAWW 300.0A	06/17/05	5168091
		Dilution Factor: 1		Analysis Time..: 07:48	Analyst ID.....: 0000229	
		Instrument ID..: W01		MS Run #.....: 5168054	MDL.....: 0.10	
Chloride	110	5.0	mg/L	MCAWW 300.0A	06/17/05	5168088
		Dilution Factor: 5		Analysis Time..: 10:45	Analyst ID.....: 0000224	
		Instrument ID..: W01		MS Run #.....: 5168052	MDL.....: 1.5	
Nitrate as N	ND	0.10	mg/L	MCAWW 300.0A	06/17/05	5168093
		Dilution Factor: 1		Analysis Time..: 07:48	Analyst ID.....: 0000222	
		Instrument ID..: W01		MS Run #.....: 5168055	MDL.....: 0.030	
Nitrite as N	ND	0.10	mg/L	MCAWW 300.0A	06/17/05	5168090
		Dilution Factor: 1		Analysis Time..: 07:48	Analyst ID.....: 0000225	
		Instrument ID..: W01		MS Run #.....: 5168053	MDL.....: 0.030	
Sulfate	89.1	5.0	mg/L	MCAWW 300.0A	06/17/05	5168094
		Dilution Factor: 5		Analysis Time..: 10:45	Analyst ID.....: 0000223	
		Instrument ID..: W01		MS Run #.....: 5168056	MDL.....: 1.0	
Total Organic Carbon	13.3	1.0	mg/L	SW846 9060	06/20/05	5171639
(TOC)				Dilution Factor: 1	Analysis Time..: 17:55	Analyst ID.....: 9999956
				Instrument ID..: W08	MS Run #.....: 5172119	MDL.....: 0.40

NOTE (S) :

RL Reporting Limit

B Estimated result. Result is less than RL.



**STL**

# STL Los Angeles Raw Data

# QC DATA ASSOCIATION SUMMARY

**E5F170101**

## Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
001	WG	SW846 8260B		5171669	5171380
002	WG	MCAWW 300.0A		5168088	5168052
	WG	MCAWW 300.0A		5168094	5168056
	WG	MCAWW 300.0A		5168093	5168055
	WG	SW846 9060		5171406	5171311
	WG	MCAWW 300.0A		5168091	5168054
	WG	MCAWW 300.0A		5168090	5168053
	WG	SW846 8260B		5172578	5172359
	WG	SW846 6010B		5168217	5168147
	WG	SW846 6010B		5172210	5173249
003	WG	MCAWW 300.0A		5168088	5168052
	WG	MCAWW 300.0A		5168094	5168056
	WG	MCAWW 300.0A		5168093	5168055
	WG	SW846 9060		5171639	5172119
	WG	MCAWW 300.0A		5168091	5168054
	WG	MCAWW 300.0A		5168090	5168053
	WG	SW846 8260B		5171669	5171380
	WG	SW846 6010B		5168217	5168147
	WG	SW846 6010B		5172210	5173249
004	WG	MCAWW 300.0A		5168088	5168052
	WG	MCAWW 300.0A		5168094	5168056
	WG	MCAWW 300.0A		5168093	5168055
	WG	SW846 9060		5171639	5172119
	WG	MCAWW 300.0A		5168091	5168054
	WG	MCAWW 300.0A		5168090	5168053
	WG	SW846 8260B		5172578	5172359
	WG	SW846 6010B		5168217	5168147
	WG	SW846 6010B		5172210	5173249
005	WG	MCAWW 300.0A		5168088	5168052
	WG	MCAWW 300.0A		5168094	5168056
	WG	MCAWW 300.0A		5168093	5168055
	WG	SW846 9060		5171639	5172119
	WG	MCAWW 300.0A		5168091	5168054
	WG	MCAWW 300.0A		5168090	5168053
	WG	SW846 8260B		5172578	5172359
	WG	SW846 6010B		5168217	5168147
	WG	SW846 6010B		5172210	5173249

**METHOD BLANK REPORT**

**GC/MS Volatiles**

<b>Client Lot #....:</b> E5F170101	<b>Work Order #....:</b> HD1W61AA	<b>Matrix.....:</b> WATER
<b>MB Lot-Sample #:</b> E5F200000-669		
	<b>Prep Date.....:</b> 06/17/05	<b>Analysis Time..:</b> 18:55
<b>Analysis Date...:</b> 06/17/05	<b>Prep Batch #....:</b> 5171669	<b>Instrument ID..:</b> MSQ
<b>Dilution Factor:</b> 1		
	<b>Analyst ID.....:</b> 015590	

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
Acetone	ND	10	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
Bromobenzene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
2-Butanone	ND	5.0	ug/L	SW846 8260B
n-Butylbenzene	ND	1.0	ug/L	SW846 8260B
sec-Butylbenzene	ND	1.0	ug/L	SW846 8260B
tert-Butylbenzene	ND	1.0	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
2-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
4-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
1,2-Dibromo-3-chloropropane	ND	2.0	ug/L	SW846 8260B
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	SW846 8260B
Dibromomethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
Dichlorodifluoromethane	ND	2.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
1,3-Dichloropropane	ND	1.0	ug/L	SW846 8260B
2,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloropropene	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B

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**METHOD BLANK REPORT**

**GC/MS Volatiles**

**Client Lot #....: E5F170101**

**Work Order #....: HD1W61AA**

**Matrix.....: WATER**

<b>PARAMETER</b>	<b>RESULT</b>	<b>REPORTING</b>		
		<b>LIMIT</b>	<b>UNITS</b>	<b>METHOD</b>
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8260B
2-Hexanone	ND	5.0	ug/L	SW846 8260B
Isopropylbenzene	ND	1.0	ug/L	SW846 8260B
p-Isopropyltoluene	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	5.0	ug/L	SW846 8260B
Methyl tert-butyl ether	ND	1.0	ug/L	SW846 8260B
Naphthalene	ND	1.0	ug/L	SW846 8260B
n-Propylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
1,2,3-Trichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,2,4-Trichloro- benzene	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Trichlorofluoromethane	ND	2.0	ug/L	SW846 8260B
1,2,3-Trichloropropane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichlorotrifluoro- ethane	ND	1.0	ug/L	SW846 8260B
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	ND	1.0	ug/L	SW846 8260B
o-Xylene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	1.0	ug/L	SW846 8260B
<b>SURROGATE</b>	<b>PERCENT</b>	<b>RECOVERY</b>		
		<b>RECOVERY</b>	<b>LIMITS</b>	
Bromofluorobenzene	96	(75 - 130)		
1,2-Dichloroethane-d4	126	(65 - 135)		
Toluene-d8	99	(80 - 130)		

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

**METHOD BLANK REPORT**

**GC/MS Volatiles**

<b>Client Lot #....:</b> E5F170101	<b>Work Order #....:</b> HD4GQ1AA	<b>Matrix.....:</b> WATER
<b>MB Lot-Sample #:</b> E5F210000-578		
<b>Analysis Date...:</b> 06/20/05	<b>Prep Date.....:</b> 06/20/05	<b>Analysis Time..:</b> 18:45
<b>Dilution Factor:</b> 1	<b>Prep Batch #....:</b> 5172578	<b>Instrument ID..:</b> MSR
		<b>Analyst ID.....:</b> 015590

PARAMETER	REPORTING			
	RESULT	LIMIT	UNITS	METHOD
Acetone	ND	10	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
Bromobenzene	ND	1.0	ug/L	SW846 8260B
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
2-Butanone	ND	5.0	ug/L	SW846 8260B
n-Butylbenzene	ND	1.0	ug/L	SW846 8260B
sec-Butylbenzene	ND	1.0	ug/L	SW846 8260B
tert-Butylbenzene	ND	1.0	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
2-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
4-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	SW846 8260B
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	SW846 8260B
Dibromomethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
Dichlorodifluoromethane	ND	2.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
1,3-Dichloropropane	ND	1.0	ug/L	SW846 8260B
2,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloropropene	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B

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**METHOD BLANK REPORT**

**GC/MS Volatiles**

**Client Lot #....: E5F170101**

**Work Order #....: HD4GQ1AA**

**Matrix.....: WATER**

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING		
		<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8260B
2-Hexanone	ND	5.0	ug/L	SW846 8260B
Isopropylbenzene	ND	1.0	ug/L	SW846 8260B
p-Isopropyltoluene	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	5.0	ug/L	SW846 8260B
Methyl tert-butyl ether	ND	1.0	ug/L	SW846 8260B
Naphthalene	ND	1.0	ug/L	SW846 8260B
n-Propylbenzene	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
1,2,3-Trichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,2,4-Trichloro- benzene	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Trichlorofluoromethane	ND	2.0	ug/L	SW846 8260B
1,2,3-Trichloropropane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichlorotrifluoro- ethane	ND	1.0	ug/L	SW846 8260B
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	ND	1.0	ug/L	SW846 8260B
o-Xylene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	1.0	ug/L	SW846 8260B
<hr/>				
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>		
		(75 - 130)		
Bromofluorobenzene	97			
1,2-Dichloroethane-d4	118	(65 - 135)		
Toluene-d8	106	(80 - 130)		

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #....: E5F170101

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
<b>MB Lot-Sample #: E5F210000-210 Prep Batch #...: 5172210</b>						
Manganese	ND	0.015	mg/L	SW846 6010B	06/21-06/22/05	HD2E21CK
		Dilution Factor: 1				
		Analysis Time..: 11:16		Analyst ID.....: 021088	Instrument ID..: M01	
Iron	ND	0.10	mg/L	SW846 6010B	06/21-06/22/05	HD2E21CL
		Dilution Factor: 1				
		Analysis Time..: 11:16		Analyst ID.....: 021088	Instrument ID..: M01	

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

DISSOLVED Metals

Client Lot #....: E5F170101

Matrix.....: WATER

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS				
MB Lot-Sample #:	E5F170000-217	Prep Batch #...:	5168217				
Manganese	0.0026 B	0.015	mg/L	SW846 6010B		06/20-06/21/05	HDTMN1AA
		Dilution Factor:	1				
		Analysis Time..:	11:30	Analyst ID....:	021088	Instrument ID..:	M01

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

**METHOD BLANK REPORT**

**General Chemistry**

**Client Lot #....: E5F170101**

**Matrix.....: WATER**

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	PREP
		LIMIT	UNITS			ANALYSIS DATE	BATCH #
Bromide	ND	0.50	mg/L		MB Lot-Sample #: E5F170000-091 MCAWW 300.0A	06/17/05	5168091
		Dilution Factor: 1					
		Analysis Time..: 06:11		Analyst ID.....: 000022		Instrument ID..: W01	
Chloride	ND	1.0	mg/L		MB Lot-Sample #: E5F170000-088 MCAWW 300.0A	06/17/05	5168088
		Dilution Factor: 1					
		Analysis Time..: 06:11		Analyst ID.....: 000022		Instrument ID..: W01	
Nitrate as N	ND	0.10	mg/L		MB Lot-Sample #: E5F170000-093 MCAWW 300.0A	06/17/05	5168093
		Dilution Factor: 1					
		Analysis Time..: 06:11		Analyst ID.....: 000022		Instrument ID..: W01	
Nitrite as N	ND	0.10	mg/L		MB Lot-Sample #: E5F170000-090 MCAWW 300.0A	06/17/05	5168090
		Dilution Factor: 1					
		Analysis Time..: 06:11		Analyst ID.....: 000022		Instrument ID..: W01	
Sulfate	ND	1.0	mg/L		MB Lot-Sample #: E5F170000-094 MCAWW 300.0A	06/17/05	5168094
		Dilution Factor: 1					
		Analysis Time..: 06:11		Analyst ID.....: 000022		Instrument ID..: W01	
Total Organic Carbon (TOC)	ND	1.0	mg/L		MB Lot-Sample #: E5F200000-406 SW846 9060	06/17/05	5171406
		Dilution Factor: 1					
		Analysis Time..: 19:30		Analyst ID.....: 999995		Instrument ID..: W08	
Total Organic Carbon (TOC)	ND	1.0	mg/L		MB Lot-Sample #: E5F200000-639 SW846 9060	06/20/05	5171639
		Dilution Factor: 1					
		Analysis Time..: 17:55		Analyst ID.....: 999995		Instrument ID..: W08	

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

**LABORATORY CONTROL SAMPLE EVALUATION REPORT**

**GC/MS Volatiles**

**Client Lot #....:** E5F170101    **Work Order #....:** HD1W61AC    **Matrix.....:** WATER  
**LCS Lot-Sample#:** E5F200000-669  
**Prep Date.....:** 06/17/05    **Analysis Date...:** 06/17/05  
**Prep Batch #....:** 5171669    **Analysis Time...:** 18:02  
**Dilution Factor:** 1    **Instrument ID...:** MSQ  
**Analyst ID.....:** 015590

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
Benzene	86	(75 - 125)	<b>SW846 8260B</b>
Chlorobenzene	84	(75 - 125)	<b>SW846 8260B</b>
1,1-Dichloroethene	81	(65 - 135)	<b>SW846 8260B</b>
Toluene	80	(75 - 125)	<b>SW846 8260B</b>
Trichloroethene	90	(75 - 135)	<b>SW846 8260B</b>

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Bromofluorobenzene	105	(75 - 130)
1,2-Dichloroethane-d4	121	(65 - 135)
Toluene-d8	102	(80 - 130)

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

**LABORATORY CONTROL SAMPLE DATA REPORT**

**GC/MS Volatiles**

**Client Lot #....:** E5F170101      **Work Order #....:** HD1W61AC      **Matrix.....:** WATER  
**LCS Lot-Sample#:** E5F200000-669  
**Prep Date.....:** 06/17/05      **Analysis Date...:** 06/17/05  
**Prep Batch #....:** 5171669      **Analysis Time...:** 18:02  
**Dilution Factor:** 1      **Instrument ID...:** MSQ  
**Analyst ID.....:** 015590

<u>PARAMETER</u>	<u>SPIKE</u>	<u>MEASURED</u>	<u>PERCENT</u>	<u>METHOD</u>
	<u>AMOUNT</u>	<u>AMOUNT</u>	<u>RECOVERY</u>	
Benzene	<b>10.0</b>	<b>8.55</b>	<b>86</b>	<b>SW846 8260B</b>
Chlorobenzene	<b>10.0</b>	<b>8.43</b>	<b>84</b>	<b>SW846 8260B</b>
1,1-Dichloroethene	<b>10.0</b>	<b>8.06</b>	<b>81</b>	<b>SW846 8260B</b>
Toluene	<b>10.0</b>	<b>7.99</b>	<b>80</b>	<b>SW846 8260B</b>
Trichloroethene	<b>10.0</b>	<b>9.03</b>	<b>90</b>	<b>SW846 8260B</b>

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	105	(75 - 130)
1,2-Dichloroethane-d4	121	(65 - 135)
Toluene-d8	102	(80 - 130)

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

**LABORATORY CONTROL SAMPLE EVALUATION REPORT**

**GC/MS Volatiles**

Client Lot #....: E5F170101      Work Order #....: HD4GQ1AC      Matrix.....: WATER  
LCS Lot-Sample#: E5F210000-578  
Prep Date.....: 06/20/05      Analysis Date...: 06/20/05  
Prep Batch #....: 5172578      Analysis Time...: 17:58  
Dilution Factor: 1      Instrument ID...: MSR  
Analyst ID.....: 015590

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
Benzene	<b>107</b>	(75 - 125)	<b>SW846 8260B</b>
Chlorobenzene	<b>104</b>	(75 - 125)	<b>SW846 8260B</b>
1,1-Dichloroethene	<b>115</b>	(65 - 135)	<b>SW846 8260B</b>
Toluene	<b>105</b>	(75 - 125)	<b>SW846 8260B</b>
Trichloroethene	<b>105</b>	(75 - 135)	<b>SW846 8260B</b>

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Bromofluorobenzene	102	(75 - 130)
1,2-Dichloroethane-d4	124	(65 - 135)
Toluene-d8	108	(80 - 130)

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

**LABORATORY CONTROL SAMPLE DATA REPORT**

**GC/MS Volatiles**

<b>Client Lot #....:</b> E5F170101	<b>Work Order #....:</b> HD4GQ1AC	<b>Matrix.....:</b> WATER
<b>LCS Lot-Sample#:</b> E5F210000-578		
<b>Prep Date.....:</b> 06/20/05	<b>Analysis Date...:</b> 06/20/05	
<b>Prep Batch #....:</b> 5172578	<b>Analysis Time...:</b> 17:58	
<b>Dilution Factor:</b> 1	<b>Instrument ID...:</b> MSR	
<b>Analyst ID.....:</b> 015590		

<u>PARAMETER</u>	<u>SPIKE</u>	<u>MEASURED</u>	<u>UNITS</u>	<u>PERCENT</u>	<u>METHOD</u>
	<u>AMOUNT</u>	<u>AMOUNT</u>		<u>RECOVERY</u>	
Benzene	<b>10.0</b>	<b>10.7</b>	ug/L	<b>107</b>	<b>SW846 8260B</b>
Chlorobenzene	<b>10.0</b>	<b>10.4</b>	ug/L	<b>104</b>	<b>SW846 8260B</b>
1,1-Dichloroethene	<b>10.0</b>	<b>11.5</b>	ug/L	<b>115</b>	<b>SW846 8260B</b>
Toluene	<b>10.0</b>	<b>10.5</b>	ug/L	<b>105</b>	<b>SW846 8260B</b>
Trichloroethene	<b>10.0</b>	<b>10.5</b>	ug/L	<b>105</b>	<b>SW846 8260B</b>

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	102	(75 - 130)
1,2-Dichloroethane-d4	124	(65 - 135)
Toluene-d8	108	(80 - 130)

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

**LABORATORY CONTROL SAMPLE EVALUATION REPORT**

**TOTAL Metals**

**Client Lot #....:** E5F170101

**Matrix.....:** WATER

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION-ANALYSIS DATE</u>	<u>WORK ORDER #</u>
LCS Lot-Sample#:	E5F210000-210	Prep Batch #....:	5172210		
Manganese	99	(85 - 120)	SW846 6010B	06/21-06/22/05	HD2E21CM
		Dilution Factor: 1		Analysis Time...: 11:22	Analyst ID.....: 021088
		Instrument ID...: M01			
Iron	105	(85 - 120)	SW846 6010B	06/21-06/22/05	HD2E21CN
		Dilution Factor: 1		Analysis Time...: 11:22	Analyst ID.....: 021088
		Instrument ID...: M01			

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

**LABORATORY CONTROL SAMPLE DATA REPORT**

**TOTAL Metals**

Client Lot #....: E5F170101

Matrix.....: WATER

PARAMETER	SPIKE	MEASURED	UNITS	PERCNT	RECVRY	PREPARATION-	WORK	ANALYSIS DATE	ORDER #
	AMOUNT	AMOUNT		METHOD					
<b>LCS Lot-Sample#:</b> E5F210000-210 <b>Prep Batch #....:</b> 5172210									
Manganese	0.500	0.497	mg/L	99	SW846 6010B	06/21-06/22/05	HD2E21CM		
			Dilution Factor: 1			Analysis Time...: 11:22		Analyst ID.....: 021088	
			Instrument ID...: M01						
Iron	1.00	1.05	mg/L	105	SW846 6010B	06/21-06/22/05	HD2E21CN		
			Dilution Factor: 1			Analysis Time...: 11:22		Analyst ID.....: 021088	
			Instrument ID...: M01						

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

**LABORATORY CONTROL SAMPLE EVALUATION REPORT**

**DISSOLVED Metals**

**Client Lot #....: E5F170101**

**Matrix.....: WATER**

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>ANALYSIS DATE</u>	<u>WORK ORDER #</u>
<b>LCS Lot-Sample#: E5F170000-217 Prep Batch #....: 5168217</b>						
Manganese	94	(85 - 120)	SW846 6010B	06/20-06/21/05	HDTMN1AE	
		Dilution Factor: 1		Analysis Time..: 11:35		Analyst ID.....: 021088
		Instrument ID...: M01				

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

**LABORATORY CONTROL SAMPLE DATA REPORT**

**DISSOLVED Metals**

Client Lot #....: E5F170101

Matrix.....: WATER

PARAMETER	SPIKE	MEASURED	UNITS	PERCNT	METHOD	PREPARATION-	WORK
	AMOUNT	AMOUNT		RECVRY		ANALYSIS DATE	ORDER #

LCS Lot-Sample#: E5F170000-217 Prep Batch #....: 5168217

Manganese 0.500 0.470 mg/L 94 SW846 6010B 06/20-06/21/05 HDTMN1AE

Dilution Factor: 1 Analysis Time...: 11:35 Analyst ID....: 021088

Instrument ID..: M01

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

**LABORATORY CONTROL SAMPLE EVALUATION REPORT**

**General Chemistry**

**Client Lot #....: E5F170101**

**Matrix.....: WATER**

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION-ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Bromide	99	Work Order #: HDR4T1AC (90 - 110)	LCS Lot-Sample#: MCAWW 300.0A	06/17/05	Analyst ID.....: 5168091
		Dilution Factor: 1		Analysis Time...: 05:55	000022
		Instrument ID...: W01			
Chloride	101	Work Order #: HDR4N1AC (90 - 110)	LCS Lot-Sample#: MCAWW 300.0A	06/17/05	Analyst ID.....: 5168088
		Dilution Factor: 1		Analysis Time...: 05:55	000022
		Instrument ID...: W01			
Nitrate as N	101	Work Order #: HDR4W1AC (90 - 110)	LCS Lot-Sample#: MCAWW 300.0A	06/17/05	Analyst ID.....: 5168093
		Dilution Factor: 1		Analysis Time...: 05:55	000022
		Instrument ID...: W01			
Nitrite as N	101	Work Order #: HDR4Q1AC (90 - 110)	LCS Lot-Sample#: MCAWW 300.0A	06/17/05	Analyst ID.....: 5168090
		Dilution Factor: 1		Analysis Time...: 05:55	000022
		Instrument ID...: W01			
Sulfate	100	Work Order #: HDR4X1AC (90 - 110)	LCS Lot-Sample#: MCAWW 300.0A	06/17/05	Analyst ID.....: 5168094
		Dilution Factor: 1		Analysis Time...: 05:55	000022
		Instrument ID...: W01			
Total Organic Carbon (TOC)	95	Work Order #: HD1LP1AC (85 - 115)	LCS Lot-Sample#: SW846 9060	06/17/05	Analyst ID.....: 5171406
		Dilution Factor: 1		Analysis Time...: 19:30	999995
		Instrument ID...: W08			
Total Organic Carbon (TOC)	104	Work Order #: HD2D41AC (85 - 115)	LCS Lot-Sample#: SW846 9060	06/20/05	Analyst ID.....: 5171639
		Dilution Factor: 1		Analysis Time...: 17:55	999995
		Instrument ID...: W08			

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

**LABORATORY CONTROL SAMPLE DATA REPORT**

**General Chemistry**

**Client Lot #....:** E5F170101

**Matrix.....:** WATER

PARAMETER	SPIKE	MEASURED	PERCNT	PREPARATION-	PREP		
	AMOUNT	AMOUNT	UNITS	RECVRY	METHOD	ANALYSIS DATE	BATCH #
Bromide				Work Order #: HDR4T1AC	LCS Lot-Sample#: E5F170000-091		
	5.00	4.97	mg/L	99	MCAWW 300.0A	06/17/05	5168091
			Dilution Factor: 1		Analysis Time...: 05:55	Analyst ID.....: 000022	
			Instrument ID...: W01				
Chloride				Work Order #: HDR4N1AC	LCS Lot-Sample#: E5F170000-088		
	25.0	25.2	mg/L	101	MCAWW 300.0A	06/17/05	5168088
			Dilution Factor: 1		Analysis Time...: 05:55	Analyst ID.....: 000022	
			Instrument ID...: W01				
Nitrate as N				Work Order #: HDR4W1AC	LCS Lot-Sample#: E5F170000-093		
	5.00	5.03	mg/L	101	MCAWW 300.0A	06/17/05	5168093
			Dilution Factor: 1		Analysis Time...: 05:55	Analyst ID.....: 000022	
			Instrument ID...: W01				
Nitrite as N				Work Order #: HDR4Q1AC	LCS Lot-Sample#: E5F170000-090		
	5.00	5.06	mg/L	101	MCAWW 300.0A	06/17/05	5168090
			Dilution Factor: 1		Analysis Time...: 05:55	Analyst ID.....: 000022	
			Instrument ID...: W01				
Sulfate				Work Order #: HDR4X1AC	LCS Lot-Sample#: E5F170000-094		
	25.0	25.0	mg/L	100	MCAWW 300.0A	06/17/05	5168094
			Dilution Factor: 1		Analysis Time...: 05:55	Analyst ID.....: 000022	
			Instrument ID...: W01				
Total Organic Carbon (TOC)				Work Order #: HD1LP1AC	LCS Lot-Sample#: E5F200000-406		
	25.0	23.8	mg/L	95	SW846 9060	06/17/05	5171406
			Dilution Factor: 1		Analysis Time...: 19:30	Analyst ID.....: 999995	
			Instrument ID...: W08				
Total Organic Carbon (TOC)				Work Order #: HD2D41AC	LCS Lot-Sample#: E5F200000-639		
	25.0	26.1	mg/L	104	SW846 9060	06/20/05	5171639
			Dilution Factor: 1		Analysis Time...: 17:55	Analyst ID.....: 999995	
			Instrument ID...: W08				

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

## MATRIX SPIKE SAMPLE EVALUATION REPORT

## GC/MS Volatiles

PARAMETER	PERCENT	RECOVERY	RPD	RPD	METHOD
	RECOVERY	LIMITS		LIMITS	
<b>Benzene</b>	95	(75 - 125)	19	(0-25)	<b>SW846 8260B</b>
	78	(75 - 125)			<b>SW846 8260B</b>
<b>Chlorobenzene</b>	97	(75 - 125)	9.8	(0-25)	<b>SW846 8260B</b>
	88	(75 - 125)			<b>SW846 8260B</b>
<b>1,1-Dichloroethene</b>	134	(65 - 135)	9.6	(0-25)	<b>SW846 8260B</b>
	121	(65 - 135)			<b>SW846 8260B</b>
<b>Toluene</b>	97	(75 - 125)	8.9	(0-25)	<b>SW846 8260B</b>
	89	(75 - 125)			<b>SW846 8260B</b>
<b>Trichloroethene</b>	98	(75 - 135)	4.2	(0-25)	<b>SW846 8260B</b>
	103	(75 - 135)			<b>SW846 8260B</b>

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	106	(75 - 130)
	103	(75 - 130)
1,2-Dichloroethane-d4	99	(65 - 135)
	97	(65 - 135)
Toluene-d8	107	(80 - 130)
	106	(80 - 130)

**NOTE (S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

**Bold print** denotes control parameters

**MATRIX SPIKE SAMPLE DATA REPORT**

**GC/MS Volatiles**

**Client Lot #....:** E5F170101      **Work Order #....:** HDR071AN-MS      **Matrix.....:** WG  
**MS Lot-Sample #:** E5F170101-003      **:** HDR071AP-MSD  
**Date Sampled....:** 06/15/05 17:59      **Date Received...:** 06/16/05 14:30      **MS Run #.....:** 5171380  
**Prep Date.....:** 06/17/05      **Analysis Date...:** 06/18/05  
**Prep Batch #....:** 5171669      **Analysis Time...:** 02:29  
**Dilution Factor:** 50      **Analyst ID.....:** 015590      **Instrument ID..:** MSQ

PARAMETER	SAMPLE	SPIKE	MEASRD	PERCNT			
	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD	METHOD
Benzene	ND	500	473	ug/L	95		SW846 8260B
	ND	500	392	ug/L	78	19	SW846 8260B
Chlorobenzene	ND	500	484	ug/L	97		SW846 8260B
	ND	500	439	ug/L	88	9.8	SW846 8260B
1,1-Dichloroethene	32	500	701	ug/L	134		SW846 8260B
	32	500	637	ug/L	121	9.6	SW846 8260B
Toluene	ND	500	484	ug/L	97		SW846 8260B
	ND	500	443	ug/L	89	8.9	SW846 8260B
Trichloroethene	87	500	578	ug/L	98		SW846 8260B
	87	500	602	ug/L	103	4.2	SW846 8260B

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Bromofluorobenzene	106	(75 - 130)
	103	(75 - 130)
1,2-Dichloroethane-d4	99	(65 - 135)
	97	(65 - 135)
Toluene-d8	107	(80 - 130)
	106	(80 - 130)

**NOTE (S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

**MATRIX SPIKE SAMPLE EVALUATION REPORT**

**GC/MS Volatiles**

<b>Client Lot #....:</b> E5F170101	<b>Work Order #....:</b> HDR061AN-MS	<b>Matrix.....:</b> WG
<b>MS Lot-Sample #:</b> E5F170101-002	HDR061AP-MSD	
<b>Date Sampled....:</b> 06/15/05 16:25	<b>Date Received..:</b> 06/16/05 14:30	<b>MS Run #.....:</b> 5172359
<b>Prep Date.....:</b> 06/20/05	<b>Analysis Date...:</b> 06/21/05	
<b>Prep Batch #....:</b> 5172578	<b>Analysis Time...:</b> 00:24	
<b>Dilution Factor:</b> 125	<b>Analyst ID....:</b> 015590	<b>Instrument ID...:</b> MSR

<b>PARAMETER</b>	<b>PERCENT</b>	<b>RECOVERY</b>	<b>RPD</b>	<b>LIMITS</b>	<b>METHOD</b>
	<b>RECOVERY</b>	<b>LIMITS</b>			
<b>Benzene</b>	<b>105</b>	(75 - 125)	<b>7.4</b>	(0-25)	<b>SW846 8260B</b>
	<b>113</b>	(75 - 125)			<b>SW846 8260B</b>
<b>Chlorobenzene</b>	<b>105</b>	(75 - 125)	<b>7.3</b>	(0-25)	<b>SW846 8260B</b>
	<b>113</b>	(75 - 125)			<b>SW846 8260B</b>
<b>1,1-Dichloroethene</b>	<b>113</b>	(65 - 135)	<b>10</b>	(0-25)	<b>SW846 8260B</b>
	<b>126</b>	(65 - 135)			<b>SW846 8260B</b>
<b>Toluene</b>	<b>105</b>	(75 - 125)	<b>7.3</b>	(0-25)	<b>SW846 8260B</b>
	<b>113</b>	(75 - 125)			<b>SW846 8260B</b>
<b>Trichloroethene</b>	<b>109</b>	(75 - 135)	<b>0.93</b>	(0-25)	<b>SW846 8260B</b>
	<b>115</b>	(75 - 135)			<b>SW846 8260B</b>

<b>SURROGATE</b>	<b>PERCENT</b>	<b>RECOVERY</b>	<b>LIMITS</b>
	<b>RECOVERY</b>	<b>LIMITS</b>	
<b>Bromofluorobenzene</b>	<b>104</b>	(75 - 130)	
	<b>106</b>	(75 - 130)	
<b>1,2-Dichloroethane-d4</b>	<b>119</b>	(65 - 135)	
	<b>117</b>	(65 - 135)	
<b>Toluene-d8</b>	<b>105</b>	(80 - 130)	
	<b>109</b>	(80 - 130)	

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

**MATRIX SPIKE SAMPLE DATA REPORT**

**GC/MS Volatiles**

**Client Lot #....:** E5F170101      **Work Order #....:** HDR061AN-MS      **Matrix.....:** WG  
**MS Lot-Sample #:** E5F170101-002                                    **HDR061AP-MSD**  
**Date Sampled....:** 06/15/05 16:25      **Date Received...:** 06/16/05 14:30      **MS Run #.....:** 5172359  
**Prep Date.....:** 06/20/05      **Analysis Date...:** 06/21/05  
**Prep Batch #....:** 5172578      **Analysis Time...:** 00:24  
**Dilution Factor:** 125      **Analyst ID.....:** 015590      **Instrument ID...:** MSR

PARAMETER	SAMPLE	SPIKE	MEASRD		PERCNT		
	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD	METHOD
Benzene	ND	1250	1320	ug/L	105		SW846 8260B
	ND	1250	1420	ug/L	113	7.4	SW846 8260B
Chlorobenzene	ND	1250	1310	ug/L	105		SW846 8260B
	ND	1250	1410	ug/L	113	7.3	SW846 8260B
1,1-Dichloroethene	110	1250	1530	ug/L	113		SW846 8260B
	110	1250	1690	ug/L	126	10	SW846 8260B
Toluene	ND	1250	1310	ug/L	105		SW846 8260B
	ND	1250	1410	ug/L	113	7.3	SW846 8260B
Trichloroethene	7100	1250	8500	ug/L	109		SW846 8260B
	7100	1250	8580	ug/L	115	0.93	SW846 8260B

SURROGATE	PERCENT	RECOVERY	RECOVERY
	RECOVERY	LIMITS	LIMITS
Bromofluorobenzene	104	(75 - 130)	
	106	(75 - 130)	
1,2-Dichloroethane-d4	119	(65 - 135)	
	117	(65 - 135)	
Toluene-d8	105	(80 - 130)	
	109	(80 - 130)	

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: E5F170101

Matrix.....: WATER

Date Sampled...: 06/17/05 14:25 Date Received..: 06/17/05 19:00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
<b>MS Lot-Sample #:</b> E5F170423-002 <b>Prep Batch #:</b> 5172210							
Manganese	99	(85 - 120)		SW846 6010B		06/21-06/22/05	HDW3M1C7
	100	(85 - 120)	0.59	(0-20) SW846 6010B		06/21-06/22/05	HDW3M1C8
		Dilution Factor: 1					
		Analysis Time..: 12:03		Instrument ID..: M01		Analyst ID.....: 021088	
		MS Run #.....: 5173249					
Iron	107	(85 - 120)		SW846 6010B		06/21-06/22/05	HDW3M1DA
	102	(85 - 120)	4.0	(0-20) SW846 6010B		06/21-06/22/05	HDW3M1DC
		Dilution Factor: 1					
		Analysis Time..: 12:03		Instrument ID..: M01		Analyst ID.....: 021088	
		MS Run #.....: 5173249					

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

**MATRIX SPIKE SAMPLE DATA REPORT**

**TOTAL Metals**

**Client Lot #....:** E5F170101

**Matrix.....:** WATER

**Date Sampled....:** 06/17/05 14:25 **Date Received..:** 06/17/05 19:00

SAMPLE PARAMETER	SPIKE AMOUNT	MEASRD AMT	PERCNT RECVRY	PREPARATION- ANALYSIS	WORK ORDER #
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**MS Lot-Sample #:** E5F170423-002 **Prep Batch #....:** 5172210

Manganese

0.0020	0.500	0.498 mg/L	99	SW846 6010B	06/21-06/22/05 HDW3M1C7
0.0020	0.500	0.501 mg/L	100	0.59 SW846 6010B	06/21-06/22/05 HDW3M1C8
Dilution Factor: 1					
Analysis Time...: 12:03				Instrument ID...: M01	Analyst ID.....: 021088
MS Run #.....: 5173249					

Iron

0.24	1.00	1.31 mg/L	107	SW846 6010B	06/21-06/22/05 HDW3M1DA
0.24	1.00	1.26 mg/L	102	4.0 SW846 6010B	06/21-06/22/05 HDW3M1DC
Dilution Factor: 1					
Analysis Time...: 12:03				Instrument ID...: M01	Analyst ID.....: 021088
MS Run #.....: 5173249					

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

DISSOLVED Metals

Client Lot #....: E5F170101

Matrix.....: WATER

Date Sampled....: 06/16/05 11:15 Date Received..: 06/16/05 16:20

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
<b>MS Lot-Sample #:</b> E5F160396-002 <b>Prep Batch #....:</b> 5168217							
Manganese	95	(85 - 120)		SW846 6010B		06/20-06/21/05 HDR0R1A4	
	99	(85 - 120)	4.1	(0-20)	SW846 6010B	06/20-06/21/05 HDR0R1A5	
		Dilution Factor:	1				
		Analysis Time..:	11:58		Instrument ID...: M01		Analyst ID.....: 021088
		MS Run #.....:	5168147				

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

**MATRIX SPIKE SAMPLE DATA REPORT**

**DISSOLVED Metals**

**Client Lot #....: E5F170101**

**Matrix.....: WATER**

**Date Sampled....: 06/16/05 11:15 Date Received..: 06/16/05 16:20**

SAMPLE PARAMETER	SPIKE AMOUNT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
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**MS Lot-Sample #: E5F160396-002 Prep Batch #....: 5168217**

**Manganese**

0.059	0.500	0.532	mg/L	95		SW846 6010B	06/20-06/21/05	HDR0R1A4
0.059	0.500	0.554	mg/L	99	4.1	SW846 6010B	06/20-06/21/05	HDR0R1A5

Dilution Factor: 1

Analysis Time...: 11:58 Instrument ID...: M01

Analyst ID.....: 021088

MS Run #.....: 5168147

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

**MATRIX SPIKE SAMPLE EVALUATION REPORT**

**General Chemistry**

**Client Lot #....:** E5F170101

**Matrix.....:** WATER

**Date Sampled....:** 06/14/05 09:36 **Date Received..:** 06/16/05 10:40

PARAMETER	PERCENT	RECOVERY	RPD				PREPARATION-	PREP
	RECOVERY	LIMITS	RPD	LIMITS	METHOD	ANALYSIS	DATE	BATCH #
Bromide			WO#: HDR0R1AW-MS/HDR0R1AX-MSD	MS	Lot-Sample #:	E5F160396-002		
	99	(80 - 120)		MCAWW 300.0A		06/17/05	5168091	
	95	(80 - 120)	3.6 (0-20)	MCAWW 300.0A		06/17/05	5168091	
			Dilution Factor: 5					
			Analysis Time...: 11:17	Instrument ID...: W01			Analyst ID.....: 000022	
			MS Run #.....: 5168054					
Chloride			WO#: HDR0R1AR-MS/HDR0R1AT-MSD	MS	Lot-Sample #:	E5F160396-002		
	99	(80 - 120)		MCAWW 300.0A		06/17/05	5168088	
	95	(80 - 120)	1.9 (0-20)	MCAWW 300.0A		06/17/05	5168088	
			Dilution Factor: 5					
			Analysis Time...: 11:17	Instrument ID...: W01			Analyst ID.....: 000022	
			MS Run #.....: 5168052					
Nitrate as N			WO#: HDR0R1A0-MS/HDR0R1A1-MSD	MS	Lot-Sample #:	E5F160396-002		
	97	(80 - 120)		MCAWW 300.0A		06/17/05	5168093	
	93	(80 - 120)	2.9 (0-20)	MCAWW 300.0A		06/17/05	5168093	
			Dilution Factor: 5					
			Analysis Time...: 11:17	Instrument ID...: W01			Analyst ID.....: 000022	
			MS Run #.....: 5168055					
Nitrite as N			WO#: HDR0R1AU-MS/HDR0R1AV-MSD	MS	Lot-Sample #:	E5F160396-002		
	98	(80 - 120)		MCAWW 300.0A		06/17/05	5168090	
	93	(80 - 120)	4.4 (0-20)	MCAWW 300.0A		06/17/05	5168090	
			Dilution Factor: 5					
			Analysis Time...: 11:17	Instrument ID...: W01			Analyst ID.....: 000022	
			MS Run #.....: 5168053					
Sulfate			WO#: HDR0R1A2-MS/HDR0R1A3-MSD	MS	Lot-Sample #:	E5F160396-002		
	100	(80 - 120)		MCAWW 300.0A		06/17/05	5168094	
	97	(80 - 120)	2.3 (0-20)	MCAWW 300.0A		06/17/05	5168094	
			Dilution Factor: 5					
			Analysis Time...: 11:17	Instrument ID...: W01			Analyst ID.....: 000022	
			MS Run #.....: 5168056					
Total Organic Carbon (TOC)			WO#: HDP931AG-MS/HDP931AH-MSD	MS	Lot-Sample #:	E5F160183-001		
	104	(85 - 115)		SW846 9060		06/20/05	5172206	
	97	(85 - 115)	5.7 (0-20)	SW846 9060		06/20/05	5172206	
			Dilution Factor: 1					
			Analysis Time...: 17:55	Instrument ID...: W08			Analyst ID.....: 999995	
			MS Run #.....: 5172119					

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #....: E5F170101

Matrix.....: WATER

Date Sampled...: 06/14/05 09:36 Date Received..: 06/16/05 10:40

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-	PREP
						ANALYSIS DATE	BATCH #
Total Organic Carbon (TOC)		WO#: HDQ0J1AG-MS/HDQ0J1AH-MSD		MS	Lot-Sample #: E5F160260-005		
	104	(85 - 115)		SW846 9060		06/17/05	5171406
	103	(85 - 115) 1.2 (0-20)		SW846 9060		06/17/05	5171406
		Dilution Factor: 1					
		Analysis Time..: 19:30		Instrument ID..: W08		Analyst ID.....: 999995	
		MS Run #.....: 5171311					

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

**MATRIX SPIKE SAMPLE DATA REPORT**

**General Chemistry**

**Client Lot #....:** E5F170101

**Matrix.....:** WATER

**Date Sampled....:** 06/14/05 09:36 **Date Received..:** 06/16/05 10:40

PARAMETER	SAMPLE	SPIKE	MEASRD		PERCNT			PREPARATION-		PREP
	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD	METHOD	ANALYSIS DATE	BATCH #	
<b>Bromide</b>										
				WO#:	HDR0R1AW-MS/HDR0R1AX-MSD		MS Lot-Sample	#:	E5F160396-002	
	0.45	12.5	12.8	mg/L	99		MCAWW 300.0A	06/17/05	5168091	
	0.45	12.5	12.3	mg/L	95	3.6	MCAWW 300.0A	06/17/05	5168091	
			Dilution Factor:	5						
			Analysis Time..:	11:17		Instrument ID..:	W01		Analyst ID.....:	000022
			MS Run #.....:	5168054						
<b>Chloride</b>										
				WO#:	HDR0R1AR-MS/HDR0R1AT-MSD		MS Lot-Sample	#:	E5F160396-002	
	76.1	62.5	138	mg/L	99		MCAWW 300.0A	06/17/05	5168088	
	76.1	62.5	136	mg/L	95	1.9	MCAWW 300.0A	06/17/05	5168088	
			Dilution Factor:	5						
			Analysis Time..:	11:17		Instrument ID..:	W01		Analyst ID.....:	000022
			MS Run #.....:	5168052						
<b>Nitrate as N</b>										
				WO#:	HDR0R1A0-MS/HDR0R1A1-MSD		MS Lot-Sample	#:	E5F160396-002	
	5.5	12.5	17.7	mg/L	97		MCAWW 300.0A	06/17/05	5168093	
	5.5	12.5	17.2	mg/L	93	2.9	MCAWW 300.0A	06/17/05	5168093	
			Dilution Factor:	5						
			Analysis Time..:	11:17		Instrument ID..:	W01		Analyst ID.....:	000022
			MS Run #.....:	5168055						
<b>Nitrite as N</b>										
				WO#:	HDR0R1AU-MS/HDR0R1AV-MSD		MS Lot-Sample	#:	E5F160396-002	
	ND	12.5	12.2	mg/L	98		MCAWW 300.0A	06/17/05	5168090	
	ND	12.5	11.7	mg/L	93	4.4	MCAWW 300.0A	06/17/05	5168090	
			Dilution Factor:	5						
			Analysis Time..:	11:17		Instrument ID..:	W01		Analyst ID.....:	000022
			MS Run #.....:	5168053						
<b>Sulfate</b>										
				WO#:	HDR0RIA2-MS/HDR0RIA3-MSD		MS Lot-Sample	#:	E5F160396-002	
	44.5	62.5	107	mg/L	100		MCAWW 300.0A	06/17/05	5168094	
	44.5	62.5	105	mg/L	97	2.3	MCAWW 300.0A	06/17/05	5168094	
			Dilution Factor:	5						
			Analysis Time..:	11:17		Instrument ID..:	W01		Analyst ID.....:	000022
			MS Run #.....:	5168056						
<b>Total Organic Carbon (TOC)</b>										
				WO#:	HDP931AG-MS/HDP931AH-MSD		MS Lot-Sample	#:	E5F160183-001	
	7.2	25.0	33.3	mg/L	104		SW846 9060	06/20/05	5172206	
	7.2	25.0	31.4	mg/L	97	5.7	SW846 9060	06/20/05	5172206	
			Dilution Factor:	1						
			Analysis Time..:	17:55		Instrument ID..:	W08		Analyst ID.....:	999995
			MS Run #.....:	5172119						

(Continued on next page)

**MATRIX SPIKE SAMPLE DATA REPORT**

**General Chemistry**

**Client Lot #....:** E5F170101

**Matrix.....:** WATER

**Date Sampled....:** 06/14/05 09:36 **Date Received..:** 06/16/05 10:40

PARAMETER	SAMPLE SPIKE	MEASRD		PERCNT			METHOD	PREPARATION-	PREP
	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD		ANALYSIS DATE	BATCH #
Total Organic Carbon (TOC)				WO#: HDQ0J1AG-MS/HDQ0J1AH-MSD			MS Lot-Sample #:	E5F160260-005	
	2.1	25.0	28.2	mg/L	104		SW846	9060	06/17/05 5171406
	2.1	25.0	27.8	mg/L	103	1.2	SW846	9060	06/17/05 5171406
			Dilution Factor: 1				Instrument ID.: W08		
			Analysis Time..: 19:30				Analyst ID.....: 999995		
			MS Run #.....: 5171311						

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

**BOE-C6-0012045**



Client Name: Arcadis  
Contact: Eric Lothman  
Address: 1400 North Harbor  
Bldg # 700  
Fullerton, CA 92835

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Page: Page 1 of 5  
Lab Proj #: P0506319  
Report Date: 06/30/05  
Client Proj Name: Boeing C-6  
Client Proj #: CA000663.0001.00003

## Laboratory Results

Total pages in data package: 6

Lab Sample #	Client Sample ID
P0506319-01	IRZMW004-WG061505-01
P0506319-02	IRZMW002-WG061505-01
P0506319-03	CMW001-WG061505-01
P0506319-04	CMW002-WG061505-01

Microseeps test results meet all the requirements of the NELAC standards.

Approved By:

The analytical results reported here are reliable and usable to the precision expressed in this report. As required by some regulating authorities, a full discussion of the uncertainty in our analytical results can be obtained at our web site or through customer service. Unless otherwise specified, all results are reported on a wet weight basis.

As a valued client we would appreciate your comments on our service.  
Please call customer service at (412)826-5245 or email [bhans@microseeps.com](mailto:bhans@microseeps.com)

Case Narrative:

## CHAIN - OF - CUSTODY RECORD

POS 06319

**Phone:** (412) 826-5245

**Microseeps, Inc.** - 220 William Pitt Way - Pittsburgh, PA 15222

Fax No.: (412) 826-3433

Company: READIS

卷之三

**Co. Address:** 400 N. WINE BLDG., SUITE 700, ATLANTA

ERIC LOTHMAN / BARRY MOLNATH

**Proj. Location:**

Proj. Number: 105. Location: See line C-2

Phone #: (71)

-Sampler's signature :

-122-

Sample ID	Sample Description	Date	Time	Comp	Grab	# Cont.
TR2MNW804	NGC 61505 - 01	10/13/05	1625			200
TR2MNW802	NGC 61505 - 01	10/13/05	1759			200
CNW801	NGC 61505 - 01	"	1900			
CNW802	NGC 61505 - 01	"	2005			

DISSOLVED OXYGEN  
CARBON DIOXIDE  
NITROGEN  
METHANE  
ETHANE  
ETHYLENE

Client Name: Arcadis  
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Address: 1400 North Harbor  
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Fullerton, CA 92835

Page: Page 2 of 5  
Lab Proj #: P0506319  
Report Date: 06/30/05  
Client Proj Name: Boeing C-6  
Client Proj #: CA000663.0001.00003

Sample Description	Matrix	Lab Sample #	Sampled Date/Time		Received
	Water	P0506319-01	15 Jun. 05	16:25	17 Jun. 05 12:54
Analyte(s)	Result	PQL	Units	Method #	Analysis Date
<b>Risk Analysis</b>					
Carbon dioxide	42.000	5.000	mg/L	AM20GAX	6/29/05
Ethane	0.047	0.025	ug/L	AM20GAX	6/29/05
Ethene	0.120	0.025	ug/L	AM20GAX	6/29/05
Methane	67.000	0.100	ug/L	AM20GAX	6/29/05
Nitrogen	20.000	0.400	mg/L	AM20GAX	6/29/05
Oxygen	2.900	0.500	mg/L	AM20GAX	6/29/05



N - NELAC certified analysis

Client Name: Arcadis  
Contact: Eric Lothman  
Address: 1400 North Harbor  
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Page: Page 3 of 5  
Lab Proj #: P0506319  
Report Date: 06/30/05  
Client Proj Name: Boeing C-6  
Client Proj #: CA000663.0001.00003

Sample Description	Matrix	Lab Sample #	Sampled Date/Time	Received		
IRZMW002-WG061505-01	Water	P0506319-02	15 Jun. 05 17:59	17 Jun. 05 12:54		
<b>RiskAnalysis</b>						
Carbon dioxide	30.000	5.000	mg/L	AM20GAX	6/29/05	mm
Ethane	0.086	0.025	ug/L	AM20GAX	6/29/05	mm
Ethene	0.670	0.025	ug/L	AM20GAX	6/29/05	mm
Methane	59.000	0.100	ug/L	AM20GAX	6/29/05	mm
Nitrogen	17.000	0.400	mg/L	AM20GAX	6/29/05	mm
Oxygen	0.750	0.500	mg/L	AM20GAX	6/29/05	mm



N - NELAC certified analysis

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Page: Page 4 of 5  
Lab Proj #: P0506319  
Report Date: 06/30/05  
Client Proj Name: Boeing C-6  
Client Proj #: CA000663.0001.00003

Sample Description	Matrix	Lab Sample #	Sampled Date/Time		Received
CMW001-WG061505-01	Water	P0506319-03	15 Jun. 05 19:08		17 Jun. 05 12:54
Analyte(s)	Result	PQL	Units	Method #	Analysis Date
RiskAnalysis					By
Carbon dioxide	10.000	5.000	mg/L	AM20GAX	6/29/05
Ethane	0.220	0.025	ug/L	AM20GAX	6/29/05
Ethene	0.300	0.025	ug/L	AM20GAX	6/29/05
Methane	6.300	0.100	ug/L	AM20GAX	6/29/05
Nitrogen	19.000	0.400	mg/L	AM20GAX	6/29/05
Oxygen	2.300	0.500	mg/L	AM20GAX	6/29/05



N - NELAC certified analysis

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Page: Page 5 of 5  
Lab Proj #: P0506319  
Report Date: 06/30/05  
Client Proj Name: Boeing C-6  
Client Proj #: CA000663.0001.00003

Sample Description	Matrix	Lab Sample #	Sampled Date/Time	Received		
CMW002-WG061505-01	Water	P0506319-04	15 Jun. 05 20:08	17 Jun. 05 12:54		
<b>RiskAnalysis</b>						
Carbon dioxide	15.000	5.000	mg/L	AM20GAX	6/29/05	mm
Ethane	0.240	0.025	ug/L	AM20GAX	6/29/05	mm
Ethene	0.071	0.025	ug/L	AM20GAX	6/29/05	mm
Methane	3.300	0.100	ug/L	AM20GAX	6/29/05	mm
Nitrogen	21.000	0.400	mg/L	AM20GAX	6/29/05	mm
Oxygen	4.400	0.500	mg/L	AM20GAX	6/29/05	mm



N - NELAC certified analysis